PAPER MERCHANT PERFORMANCE FOR THE YEAR 1980

PAPER MERCHANT PERFORMANCE TRENDS FOR THE YEARS 1972-1980

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INTRODUCTION PAPER MERCHANT PERFORMANCE FOR THE YEAR 1980

Paper Merchant Performance for the Year 1980 reports the results of a survey of the operations of participating members of the National Paper Trade Association (NPTA) for the calendar year 1980. The survey was designed by the Statistical Review Committee of the NPTA and Management Foresight, Inc. (MFI) of Columbus, Ohio. (The survey methodology is set forth in Appendix B.) Confidential survey forms were sent directly to MFI by participating NPTA member firms. (A copy of the questionnaire appears in Appendix G.) MFI then loaded the data into a computer data base and produced confidential and individual company reports, Industry Performance Surveys and the information appearing here. This is the fourth consecutive year in which MFI has conducted the survey for the NPTA.

246 firms, regional divisions and/or branches of larger firms (branch reporting has been encouraged since the 1979 survey) submitted survey forms. The participating firms represented $6.1 billion dollars in 1980 sales which is a modest increase from the $5.9 billion in sales represented in the 1979 survey. (Details on the number of participants and their sales characteristics are included in Appendix A.)

As in the past, each survey participant received a confidential, individualized Performance Analysis Report (PAR) which compared his firm's performance to the performances of similar groups of firms in the industry. Each PAR contains extensive operational and performance results for the individual firm and for the industry.

This edition of Paper Merchant Performance reports paper merchant performance trends from 1972, with especially intensive coverage beginning with MFI's calculations for the 1977 business year.

The text of this report is organized into four chapters according to commodity emphasis groupings that are explained in each chapter. Performance measures appear in the form of composite averages in the chapters and as medians in tables following the chapters. Appendices define the measures and the survey's methodology.

CHAPTER ONE OVERALL PAPER MERCHANT PERFORMANCE

The NPTA's members sell industrial and printing papers; some members specialize in one or the other of these commodity lines; some specialize in both. Now the report in this chapter disregards the division of firms by commodity line emphasis; this chapter reports rather the performance results of all 246 participating firms as a single group. For this reason, this chapter reports overall paper merchant performance under the category all paper merchant firms and is representative of the paper merchant industry. (See Appendix A for information on each commodity emphasis group's contributions to this survey, and see Appendix B for a statement of the survey's methodology.)

SALES PERFORMANCE

High rates of price inflation continued through 1980, and this survey understands that the maintenance of operating

EXHIBIT 1

SALES TRENDS FOR PARTICIPATING PAPER MERCHANT FIRMS
FOR THE YEARS 1977-78-79-80
(All Values Are Composite Averages)[1]

	% Sales Changes Over Prior Year			
	1977	1978	1979	1980
All Paper Merchant Firms	11.61	14.44	17.07	9.74
Printing Paper Merchant Firms	13.67	17.58	22.22	7.61
Industrial Paper Merchant Firms	7.10	13.40	16.86	11.75
Dual Paper Merchant Firms	11.62	13.03	14.16	11.54
Change in Producer Price/Index for Commodity Code 091301 "Paper, Except Newsprint"[2] (%)	6.30	10.02	11.87	10.95
Change in Producer Price/Index for Commodity Code 0915 "Converted Paper and Paperboard Products"[3] (%)	3.30	10.27	12.11	11.30
Change in Consumer Price Index (%)[4]	6.77	9.64	13.50	12.40

[1]See Appendix B for a discussion of the composite average concept, how the results were grouped and for other methodological issues.

[2]Source: Producer Prices & Price Indexes, U.S. Dept. of Labor, Bureau of Labor Statistics. The code group 091301 includes printing paper, book paper, bond wrapping paper, sack paper, buthcher's paper and wax paper. The change in the index is calculated from December to Dember.

[3]Source: Producer Prices & Price Indexes. The code group 0915 includes sanitary papers & health products (tissues, towels & napkins), paper bags & shipping sacks, paper boxes and containers, tape, office supplies & accessories and composite cans.

[4]Source: Consumer Price Index for All Urban Consumers. Calculated from December to December.

profitability requires increasing sales dollar volumes. Exhibit 1 shows that the composite average sales (See Appendix B for a statement of the composite average concept.) of all paper merchant firms increased by 9.74% in 1980 over 1979. This overall result is slightly better than half of the 1979 rate of sales growth but less than the Producer Price Index increases for the year. This slippage of merchant sales with respect to producer prices evidences an actual decline in the physical sales volume of paper merchant distributors last year.

In sharp contrast to the 1977-79 experience, printing paper merchant sales grew slower than the rest of the industry in 1980 and more than two percentage points less than the Producer Price Index for their commodity line. The industrial and dual paper merchants' sales growth rates also dropped, although not so sharply. In fact, their sales growth rates were slightly ahead of producer price increases and close to the overall inflation rate.

PROFITABILITY PERFORMANCE

The NPTA/MFI Profit Model, which is outlined in Appendix C, is presented in Exhibit 2. It shows the combined performance of the industry in three key areas, namely, in profit margin performance, which appears in column 1, in asset management performance, which appears under column 2, and in financial leverage position or balance, which appears under column 4. Appendix D defines the reported measures.

The measure called Return On Capital Employed, which appears in column 6, is a measure that compares the total operating profit of the industry, including interest paid, to the capital that the industry employed, where capital includes both equity and interest bearing debt. Return On Capital Employed increased slightly to 23.71% in 1980. Notice that the printing emphasis firms, despite their 1980 sales volume decline, had the highest rate of Return On Capital Employed.

Column 5 of Exhibit 2 indicates that the industry acheived a before tax Return On Net Worth of 27.60% in 1980 which was better than 1979's performance of 27.30%.

The measure Total Assets To Net Worth, or the financial leverage multiplier, which appears in column 4, declined to 1.92 times in 1980; this is below the +2.5 times of the typical wholesale-distribution firm and conservative in itself. This decline was the result of the continued improvement in asset utilization or turnover, the continued strength in industry profitability as well as the reduced asset financing requirements which are implicit in the slower sales growth rates.

Column 3 of Exhibit 2 shows that the industry return on assets, namely, its Net Profits Before Taxes To Total Assets (BOTA) increased to 14.39% in 1980. This is a four year high that is a particularly strong performance in a period of slow sales growth.

As in 1979, there was little distortion in the calculated industry return on total assets caused by the use of LIFO accounting. The LIFO Adjusted performance measures reported in the individual company PARs were relatively close to the unadjusted measure.

The improvement in the industry return on assets that was acheived in 1980 was the result of increases in both net profit margin, which appears in column 1, and total asset turnover, which appears in column 2. The all merchants' profit margin and asset turnover measures both reached four year highs; profit margin increased to 3.24% and asset turnover increased to 4.52 times. The printing emphasis firms compensated for a slight drop in asset turnover with a profit margin increase. The industrial emphasis firms acheived an increase in both profit margin and asset turnover, while the dual firms maintained a high profit margin while reaching an all time high asset turnover.

EXHIBIT 2

1980 PROFITABILITY PERFORMANCE
FOR
NPTA FIRMS REPORTING TO MANAGEMENT FORESIGHT, INC.
(Composite Average values)[1]

Type of Paper Merchant Firms		(1) Net Profit Before tax / Net Sales (%)	× (2) Net Sales / Total Assets (X)	= (3) Net Profit Before Tax / Total Assets (%)	× (4) Total Assets / Net Worth (X)	= (5) Net Profit Before tax / Net Worth (%)	(6) Return on Capital Employed[2] (%)
	1980	3.24	4.52	14.39	1.92	27.66	23.71
	1979	3.18	4.37	13.52	2.01	27.30	23.16
All Firms	1978	2.62	4.44	11.24	2.05	25.08	19.25
	1977	2.64	4.31	11.63	1.88	22.17	20.87
	1980	3.20	4.56	14.98	1.93	29.05	24.81
Printing	1979	3.16	4.65	14.53	2.26	33.15	25.72
Emphasis	1978	2.35	4.41	10.51	2.30	24.32	19.71
Firms	1977	2.65	4.11	11.30	1.79	21.12	22.19
	1980	2.54	4.00	10.17	2.12	21.63	18.17
Industrial	1979	2.31	3.93	9.07	2.03	18.69	15.95
Emphasis	1978	2.17	4.04	8.74	1.99	17.39	14.74
Firms	1977	2.53	3.83	9.49	2.00	18.97	18.69
	1980	3.42	4.66	15.32	1.84	28.14	24.41
Dual	1979	3.41	4.32	14.22	1.87	26.56	23.72
Emphasis	1978	2.85	4.57	12.40	1.94	23.99	20.23
Firms	1977	2.65	4.53	12.29	1.90	23.40	20.72

[1]See Appendix B for a discussion of survey methodology. [2]"Return on Capital Employed" was defined in 1977 and prior years as "net profit before taxes plus interest on borrowed funds minus income from outside investments" divided by "net worth or owner's equity plus long term debt minus outside investments". In 1978 and later years "Bank Loans Due in Less Than One Year" was added to the denominator of the ratio (the "capital invested") to recognize that some, if not most, of the total interest paid by the typical paper distributor resulted from bank loans. See Appendix D for a complete definition of measures.

In summary, the industry maintained, or modestly improved, its profitability in 1980. This is particularly impressive in view of the fact that general business conditions were weaker, that many paper products came off allocation and that the sales growth of the industry was much lower than in previous years.

OTHER PERFORMANCE MEASURES

Exhibit 3 presents the 1977-80 performance measures for the All Paper Merchants group. The major results shown in the exhibit are:

- Warehouse Sales increased to 52.4% of total sales.
- Direct Sales increased slightly to 42.6% of Total Sales.
- Average Warehouse and Indirect Order Size increased 15%.
- Gross Profit Margin percentages were generally down but stable.
- Net Sales Per Employee increased only 6% to $258,290, which was less than the +9.74 sales volume increase for the All Paper Merchants group.
- Sales Service and Selling Expense As a Percent of Gross Trading Margin increased to the 1977-78 levels.
- Total Employee Compensation As a Percent of Gross Trading Margin declined to a four year low.
- Non-people Expenses As a Percent of Gross Trading Margin was introduced. this year.

- Operating Expenses As A Percent of Gross Trading Margin declined slightly.
- In contrast to the improvements in operating expense control, Inventory Turnover declined by half a turn to only 5.23 times in 1980.
- Days Receivables Outstanding declined by two days to 40.3 days.

1980 survey performance measures in the form of medians for all Paper Merchants appear in Tables 1 and 2 following Chapter Four.

EXHIBIT 3
SUMMARY PERFORMANCE MEASURES
FOR
ALL PAPER MERCHANTS
(Composite Averages)[1]

	1977	1978	1979	1980
SALES				
Sales Change Over Prior Year --%	11.61%	14.44%	17.07%	9.74%
Warehouse Sales -- % Total Sales (%)	56.19%	49.29%	50.46%	52.41%
Indirect Sales -- % Total Sales	N/A	6.90%	5.89%	5.96%
Warehouse & Indirect Sls --% Total Sls	N/A	56.69%	57.53%	57.42%
Direct Sales -- % Total Sales (%)	43.81%	43.31%	42.47%	42.63%
Average Warehouse Order Size ($)	$ 203	$ 213	$ 235	$ 271
Average Indirect Order Size	N/A	$ 500	$ 535	$ 638
Average Warehouse & Indirect Order Size	N/A	$ 215	$ 244	$ 281
Average Direct Order Size ($)	$2085	$2591	$2909	$3183
GROSS PROFIT MARGIN				
Warehouse Trading Margin -- % Whse Sls	22.98%	23.38%	24.12%	24.09%
Indirect Trading Margin -- % Indirect Sales	N/A	17.81%	19.14%	18. 1%
Whse & Indirect Trading Margin-- % Whse & Ind. Sls.	N/A	22.99%	23.46%	23.86%
Direct Trading Margin -- % Direct Sales	8.02%	8.36%	8.78%	8.26%
PERSONNEL PRODUCTIVITY				
Net Sales Per Employee ($)	$193,810	$217,080	$242,700	$258,290
Gross Profit Per Employee ($)	$ 32,180	$ 35,830	$ 41,550	$ 45,260
EXPENSE CONTROL				
Total Empl. Compensation -- % Gross Trading Margin[3]	59.16%	59.95%	57.09%	56.37%
Sales Service & Selling Expense -- % Gross Margin	35.57%	35.64%	34.73%	35.50%
Non-People Expense -- % Gross Trading Margin	--	--	--	25.39%
Operating Expense -- % Gross Trading Margin	84.65%	84.46%	82.09%	81.71%
ASSET MANAGEMENT				
Inventory Turnover (times)[2,4]	5.89x	5.59x	5.78x	5.23x
Days Receivables Outstanding (days)[5]	40.8	42.5	42.4	40.3

[1]See Appendix B for a discussion of the composite average.
[2]Data on "Indirect Sales" were added to the survey in 1978. Appendix E discusses survey additions. In 1972-77, firms may have accounted for indirect sales as either warehouse or direct sales, the only two categories then available. Thus, the 1972-77 survey results for sales mix, gross profit margin and inventory management are not directly comparable to 1978-80 data.
[3]This is the same measure as the "ratio of payroll to gross trading margin" that was reported for 1976 and prior years.
[4]Warehouse Cost of Goods Sold to Average of Beginning and Ending Inventories. This measure was also changed by the exclusion of indirect sales in 1978. Such sales were probably included in the "warehouse sales" of most firms in 1977 and that may be the major reason that the calculated "inventory turnover" was down in 1978.
[5](Ending Accounts Receivable x 365)/Net Sales

CHAPTER TWO PRINTING PAPER MERCHANT PERFORMANCE

"Printing paper merchants" are defined as those firms, divisions or branches that obtained 80% or more of their 1980 sales from printing paper products. (See Appendix A for information of the printing paper merchants' contributions to this survey.)

SALES PERFORMANCE

The key measures of sales performance for the printing paper merchants are shown in Exhibit 4. Printing paper merchants' Total Sales Volume increased in 1980 by 7.61% over the 1979 Sales: this increase was the most modest among the three product emphasis groups. Warehouse Sales, Indirect Sales and Warehouse and Indirect Sales all increased as percentage of Total Sales; Direct Sales decreased as a percentage of Total Sales.

Average Warehouse Order Size, Average Warehouse and Indirect Order Size, and Average Direct Order Size all declined slightly in 1980 from 1979's all time highs; only Average Indirect Order Size increased slightly in 1980 over 1979.

EXHIBIT 4
SALES PERFORMANCE TRENDS
FOR
PRINTING PAPER MERCHANTS
(All Values Are Composite Averages)[1]

Performance Measure	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
% Sls Change Over Prior Year	--	--	--	--	--	13.67	17.58	22.12	7.61	
Whse Sls--% Total Sls[2]	49.1	49.1	48.1	52.9	50.7	42.1	39.5	36.5	44.3	
Indirect Sls-- % Total Sls[2]	--	--	--	--	--	--	6.15	4.17	4.6	
Whse & Indirect Sls -- % Total Sls[2]	--	--	--	--	--	--	42.57	41.80	47.4	
Direct Sls -- % Total Sls[2]	--	--	--	--	--	--	57.63	58.20	52.6	
Av. Whse Order Size ($)	126.47	156.22	188.02	177.66	179.39	232.12	236.14	298.65	297.30	
Av. Indirect Order Size ($)	--	--	--	--	--	--	718.35	885.57	919.66	
Av. Whse & Indirect Order Size	--	--	--	--	--	--	265.59	317.98	313.38	
Av. Direct Order Size ($)	1,524	1,488	5,201	2,733	3,061	3,810	4,026	4,696	4,482	

Sources: 1972-1976 Data for "All Printing Paper Merchants" as reported in Paper Merchant Performance.
1977-80 MFI calculation of composite averages.

[1]See Appendix B for a discussion of composite averages, medians and other methodological issues.

[2]As discussed in Exhibit 3, footnote 2 and Appendix E, the addition of an "indirect sales" category reduced the comparability of the 1978, and later, sales gross margin and inventory turnover, to the 1977, and earlier, results. However, the 1978, and later results, are mutually comparable.

PROFITABILITY PERFORMANCE

The Profitability Model, which is outlined in Appendix C, appears in Exhibit 5. The Net Profit Before Tax measure of the printing paper firms increased to 3.28% in 1980, which was the best performance since 1976. However, the total asset turnover, viz., the measure Net Sales/Total Assets declined slightly. Yet, product of these two measures, namely, the measure Net Profit Before Taxes As A Percentage of Total Assets (which is also called the Return On Assets,) was still greater in 1980 than at anytime since 1974 (which was an abnormal year owing to shortages) because of the increase in Net Profit Before Taxes As A Percentage of Net Sales.

The financial leverage position of the printing paper merchants improved in 1980 because the financial leverage multiplier, which is shown in column 4 and defined in Appendix D, declined to 1.93 times.

As a result of the decline in the use of financial leverage, the Return On Net Worth of the printing paper merchants also declined to 29.05% last year, which is the third best performance of the last nine years. Finally, Return On Capital Employed declined only slightly to 24.81% from 25.72% in 1979.

EXHIBIT 5
PRINTING PAPER MERCHANTS
PROFIT MODEL PERFORMANCE[1]
(Composite Average Values)[1]

	(1) Net Profit Before Tax / Net Sales (%)	×	(2) Net Sales / Total Assets (X)	=	(3) Net Profit Before Tax / Total Assets (%)	×	(4) Total Assets / Net Worth (X)	=	(5) Net Profit Before Tax / Net Worth (%)	(6) Return on Capital Employed[2] (%)
1980	3.28		4.56		14.98		1.93		29.05	24.81
1979	3.16		4.65		14.53		2.26		33.15	25.72
1978	2.35		4.40		10.50		2.29		24.29	19.63
1977	2.65		4.11		11.30		1.79		21.12	22.19
1976	3.43		3.79		13.00		1.61		20.94	19.5
1975	3.72		3.31		12.31		1.65		20.32	20.9
1974	4.99		3.91		19.50		1.74		33.87	30.9
1973	3.60		3.30		11.89		1.82		21.66	18.4
1972	2.63		3.35		8.81		1.73		15.26	13.9

[1]See Appendix C for a discussion of the MFI Profit Model.
[2]"Return on Capital Employed" was defined in 1977 and prior years as "net profit before taxes plus interest on borrowed funds minus income from outside investments" divided by "net worth or owner's equity plus long term debt minus outside investments". In 1978 and later years "Bank Loans Due in Less Than One Year" was added to the denominator of the ratio (the "capital invested") to recognize that some, if not most, of the total interest paid by the typical paper distributor resulted from bank loans. See Appendix D for a complete definition of the measure.

In summary, in 1980 printing paper merchants were able to maintain a reasonable level of profitability during a period of weakened demand and continued inflation in operating expenses. In view of all the negative factors impacting the typical printing paper merchant firm in 1980, this was a solid performance.

Profit margin management and asset management, which are major determinants of profitability, are reviewed in the next two sections.

PROFIT MARGIN MANAGEMENT

Profit margin management consists of gross margin management, operating expense control and the balancing of other income and other expenses. Exhibit 6 presents several summary measures of gross margin and operating expense performance. Starting in 1978, indirect sales were created as a distinct kind of sale. Indirect sales and indirect gross trading margin information were included in the survey in 1978. 1978 and later results are mutually comparable. However, 1977 and earlier results and 1978 and later results are not fully comparable.

The Warehouse Gross Trading Margin was down slightly to 24.51% in 1980. The Indirect Gross Trading Margin was stable at 17.74%, and the combined Warehouse and Indirect Gross Trading Margin increased very slightly to 24.23%. (The sample of firms supplying the data necessary to calculate "warehouse and indirect gross trading margin as a percentage of warehouse and indirect sales" is somewhat larger than the firms supplying data needed to calculate each margin separately. Therefore, the trends in the more detailed measures do not always agree with the trend in the summary measures.) The Direct Gross Trading Margin also declined slightly to 7.50% last year.

Operating expense control deteriorated slightly in 1980. Operating Expenses increased to 78.91% of Gross Margin, but was still a better performance than that achieved in the 1975-78 period.

A new measure has been added to the survey and to Exhibit 6 this year; it is Non-people Expense As a Percent of Gross Margin. Non-people expenses are all operating expenses other than employee compensation and fringe benefit payments. Non-people expenses represented 25.79% of printing paper merchant gross profit in 1980.

Total employee compensation expenses increased slightly to 53.19% of gross margin in 1980. While this was somewhat above the 1979 level, it was better than the 1975-78 level.

Net Sales Per Employee declined but, on the other hand, Gross Margin Per Employee increased slightly. Finally, the ratio of Sales Service And Selling Expense To Gross Margin also declined.

In order to help the managers of printing paper firms establish meaningful performance goals in this crucial area, the 1979-80 performance of the upper quartile and median high-profit firms are shown in Exhibit 6-A. Notice particularly the year-to-year stability in the performance of the high ROTA firms. While it may be difficult to be a "high performer" in every area, consider what the high performing firms achieved when you set performance goals for your firm.

EXHIBIT 6A

SOME PROFIT MARGIN PERFORMANCE GOALS
FOR
PRINTING PAPER MERCHANT FIRMS
(Based on 1979 and 1980 data)

Performance Measure	Year	Upper quartile of Printing Paper Merchant Firms	Median of High ROTA Printing Paper Merchant Firms*
Warehouse Printing Paper Gross Trading Margin -- % Warehouse Printing Paper Sales	1980	27.04	25.46
	1979	27.36	24.50
Direct Printing Paper Gross Trading Margin -- % Direct Printing Paper Sales	1980	9.14	7.60
	1979	9.76	8.04
Operating Expenses -- % Gross Trading Margin	1980	75.17	70.24
	1979	73.05	70.51
Non-People Expenses -- % Gross Margin	1980	23.01	23.27
	1979	21.89	24.17
Total Employee Compensation -- % Gross Trading Margin	1980	48.39	48.35
	1979	47.69	46.28
Gross Margin Per Employee	1980	61,110	53,970
	1979	59,490	59,430

*See Appendix B for a discussion of the ROTA Profitability Group concept.

ASSET MANANAGEMENT PERFORMANCE

Exhibit 7 shows the best overall measure of asset management performance, that is to say, Total Asset Turnover, or Net Sales To Total Assets. The asset turnover of the printing paper merchants declined slightly to 4.56 times in 1980, but was still the second best performance of the last nine years.

The printing paper merchants' Inventory Turnover dropped sharply to 5.13 times in 1980. (1979's shortages exerted pressure which may have artificially increased that year's turnover.) Gross Margin Return on Inventory also declined.

The Average Collection Period decreased to only 42.5 days in 1980, which is probably an all time best performance. With 1980's very high interest rates and this reduction in collections, the industry's 1980 receivables management performance was very good.

Exhibit 7A shows some possible asset management goals for printing paper merchants.

EXHIBIT 7

ASSET MANAGEMENT PERFORMANCE
FOR
PRINTING PAPER MERCHANTS
(All Values Are Composite Averages)[1]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
OVERALL ASSET MANAGEMENT:										
Net Sls to Total Assets (X)	3.35	3.30	3.91	3.31	3.79	4.11	4.40	4.65	4.56	
INVENTORY MANAGEMENT:										
Inventory Turnover (X)[1]	4.55	4.70	4.64	3.97	4.39	5.51	4.98	6.01	5.13	
Gross Margin Return on Inventory (%)[2]	152	150	169	137	144	175	164	197	166	
ACCOUNTS RECEIVABLE MANAGEMENT:										
Av. Collection Period (Days)[3]	53	53	44	53	47	45.4	48.0	46.0	42.5	

[1]Inventory Turnover is calculated as "Cost of Warehouse Goods Sold to Average Inventory" (average of beginning and ending inventories for the year). However, remember that the definition of warehouse sales was narrowed to exclude indirect sales in 1978 and later years.

[2]In 1977, "Gross Margin Return on Inventory" was calculated as "Gross Profit Margin on Warehouse Sales" divided by "Average Inventory". The calculation was the same in 1978 and later years except that indirect sales were excluded. Thus, only the 1978 and later results are directly comparable.

[3]The calculation approach used for each measure is defined in Appendix D.

EXHIBIT 7A

SOME ASSET MANAGEMENT PERFORMANCE GOALS
FOR
PRINTING PAPER MERCHANT FIRMS
(Based on 1979 and 1980 data)

Performance Measure	Year	Upper quartile of Printing Paper Merchant Firms	Median of High ROTA Printing Paper Merchant Firms*
Net Sales to Total Assets (Times)	1980	5.58	4.60
	1979	5.53	4.95
Printing Paper Inventory Turnover (Times)	1980	7.91	5.65
	1979	8.56	7.75
Gross Margin Return on Printing Paper Inventory ($)*	1980	241.61	174.32
	1979	289.01	275.11
Days Sales in Accounts Receivable on Nov. 30 (Days)**	1980	37.4	42.6
	1979	36.1	42.8

*Based on warehouse cost of goods sold and gross profit.

**This is a somewhat more precise measure of "collection period" than the "average collection period" which is based on sales for the year. It is calculated by dividing credit sales for Oct. & Nov. by 61 to get a more accurate measure of "average credit sales per day" and then dividing this value into the Nov. 30 trade notes and accounts receivable.

FINANCIAL MANAGEMENT

As narrowly defined in the survey, financial management consists of balancing the sources of funds among debt and equity, which is called capital structure management, and maintaining the ability to pay current debts as they come due. As shown in Exhibit 8, the median Total Debt To Net Worth and the Current Debt to Net Worth declined. The slow rate of sales growth as well as continued good asset management and reasonable profitability may have been what forced down the industry's financial leverage.

With the decreased reliance on debt financing in 1980, industry liquidity also improved; the quick ratio, or Current Assets Minus Inventory To Current Liabilities, increased to 1.51 times in 1980. The industry did not rely significantly more on its suppliers because the Days Payable Outstanding on December 31, which is the average payment period, increased only slightly to 21.4 days last year.

To summarize, the typical printing paper merchant firm dealt rather effectively in 1980 with a reduced rate of sales growth. Although the asset turnover declined slightly, the profit margin improved slightly; the return on assets increased modestly; and, the return on net worth dropped a small amount because the industry used substantially less financial leverage.

EXHIBIT 8

FINANCIAL MANAGEMENT
FOR
PRINTING PAPER MERCHANTS
(All Values Are Medians)

	1977	1978	1979	1980
FINANCIAL STRUCTURE:				
Total Debt to Net Worth (%)	83.0	139.1	158.7	131.4
Current Debt to Net Worth (%)	70.0	113.1	127.4	104.5
ABILITY TO PAY CURRENT DEBTS:				
Current Assets Minus Inventory to Current Liabilities (X)	1.53	1.33	1.26	1.51
Days Payables Outstanding on Dec. 31 (Days)	23.0	22.0	21.0	21.4

CHAPTER THREE INDUSTRIAL PAPER MERCHANT PERFORMANCE

Those firms that obtained 80%, or more, of their sales volume from the sale of industrial paper products are industrial paper merchants. (See Appendix A for information on the industrial paper merchants' contributions to this survey.)

SALES PERFORMANCE

Exhibit 9 shows the industrial paper merchants' sales performance measures. The industrial paper merchants' sales volume increased 11.75% in 1980, which was slightly better than that of dual firms (11.54%) and much better than that of printing firms (7.61%)

The Producer Price Index for converted paper and paper board products, which is shown in Exhibit 1, increased 11.3% in 1980. Thus, the industrial paper merchants sales exceeded purchases by about a 0.5% "real" sales increase last Year.

Warehouse sales increased to almost 75% of total industry sales in 1980. Average Warehouse Order Size increased about 10% to $180 in 1980.

EXHIBIT 9

SALES PERFORMANCE TRENDS
FOR
INDUSTRIAL PAPER MERCHANTS
(All Values Are Composite Averages)[1]

Performance Measure	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
% Sls Change Over Prior Year	--	--	--	--	--	7.10	13.40	16.86	11.75	
Whse Sls -- % Total Sls[2]	74.4	74.3	76.4	77.6	78.5	76.8	68.9	69.9	74.7	
Indirect Sls-- % Total Sls[2]	--	--	--	--	--	--	10.6	7.0	5.4	
Whse & Indirect Sls -- % Total Sls[2]	--	--	--	--	--	--	81.7	84.6	87.3	
Direct Sls -- % Total Sls[2]	--	--	--	--	--	--	18.3	15.5	12.8	
Av. Whse Order Size ($)	94	106	131	135	140	154	163	163	180	
Av. Indirect Order Size ($)	--	--	--	--	--	--	240	278	296	
Av. Whse & Indirect Order Size	--	--	--	--	--	--	151	167	190	
Av. Direct Order Size ($)	319	444	701	649	487	506	775	1105	1060	

Sources: 1972-1976 Data for "All Printing Paper Merchants" as reported in Paper Merchant Performance. 1977 and later, MFI calculation of composite averages.

[1]See Appendix B for a discussion of composite averages, medians and other methodological issues.

[2]As discussed in Exhibit 3, footnote 2 and Appendix E, the addition of an "indirect sales" category reduced the comparability of the 1977, and earlier, sales, gross margin and inventory turnover to 1978, and later, results. However, the 1978 and later results are mutually comparable.

PROFITABILITY PERFORMANCE

Exhibit 10 shows the Profitability Model for industrial paper merchants. Net Profit Before Taxes As a Percentage of Net Sales, which appears in column 1, and total asset turnover, which is Net Sales/Total Assets appearing in column 2, both increased. The product of this profit margin and asset turnover is the measure of return on assets, or Net Profit Before Taxes As a Percentage of Total Assets. A result of the modest increases in profit margin and asset turnover is the impressive increase in return on assets to 10.17%.

The Financial Leverage Multiplier, which appears in column 4 and which measures industrial paper merchants financial leverage, increased slightly to 2.12 times. The product of this higher Financial Leverage Multilpier and the increased return on assets is the measure Return On Net Worth, or Net Profit Before Taxes As A Percentage Of Net Worth. A result of the significant increase in return on assets and of the slight increase in use of financial leverage is the significant increase in Return On Net Worth to 21.63%. Return On Capital employed rose to 18.17%.

EXHIBIT 10
INDUSTRIAL PAPER MERCHANTS
PROFIT MODEL PERFORMANCE[1]
(Composite Average Values)[1]

	(1) Net Profit Before Tax / Net Sales (%)	× (2) Net Sales / Total Assets (X)	= (3) Net Profit Before Tax / Total Assets (%)	× (4) Total Assets / Net Worth (X)	= (5) Net Profit Before Tax / Net Worth (%)	(6) Return on Capital Employed[2] (%)
1980	2.54	4.00	10.17	2.12	21.63	18.17
1979	2.31	3.93	9.07	2.03	18.69	15.95
1978	2.17	4.04	8.74	1.99	17.39	14.74
1977	2.53	3.83	9.49	2.00	18.97	18.69
1976	3.31	3.69	12.22	2.09	25.55	20.1
1975	3.65	3.71	13.56	2.11	28.57	23.6
1974	4.33	3.54	15.31	2.20	33.74	25.8
1973	2.63	3.32	8.73	2.21	19.33	15.1
1972	2.25	3.20	7.19	2.12	15.24	12.9

[1]See Appendix C for a discussion of the MFI Profit Model.

[2]"Return on Capital Employed" was defined in 1977 and prior years as "net profit before taxes plus interest on borrowed funds minus income from outside investments" divided by "net worth or owner's equity plus long term debt minus outside investments". In 1978 and later years "Bank Loans Due in Less Than One Year" was added to the denominator of the ratio (the "capital invested") to recognize that some, if not most, of the total interest paid by the typical paper distributor resulted from bank loans. See Appendix D for a complete definition of the measure.

PROFIT MARGIN MANAGEMENT

Exhibit 11 presents summary performance measures of industrial paper merchants' gross margin management and operating expense control. The measure Warehouse Gross Trading Margin As A Percentage of Warehouse Sales decreased slightly to 24.97% last year. The gross margin on direct sales was also down to 14.09% in 1980 from 15.32% in 1979. However, the key measure Warehouse and Indirect Gross Trading Margin As A Percentage of Warehouse and Indirect Sales increased almost a full percentage point to 25.39% last year.

Total Operating Expenses As A Percentage of Gross Margin increased slightly to 89.25%. The major increase must have been in the "non-people expense" area because Total Employee Compensation As A Percentage of Gross Margin dropped almost two percentage points to 61.40% which was the best performance since 1974. Thus, the average industrial paper merchant firm should take a closer look at its non-people expenses.

Net Sale Per Employee and Gross Margin Per Employee both increased in 1980. The key operating efficiency measure, i.e., Sales Service and Selling Expense As a Percentage of Gross Trading Margin, declined slightly to 36.06%, which is roughly in the middle of its historic range.

EXHIBIT 11
PROFIT MARGIN PERFORMANCE
FOR
INDUSTRIAL PAPER MERCHANTS
(All Values Are Composite Averages)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
GROSS PROFIT MARGIN PERFORMANCE[1]										
Warehouse Gross Margin -- % Warehouse Sales	23.6	23.7	26.2	25.3	24.5	23.82	24.50	25.22	24.97	
Indirect Gross Margin -- % Indirect Sales	--	--	--	--	--	--	22.90	25.10	25.68	
Warehouse & Indirect GM -- % Whse & Indirect Sls	--	--	--	--	--	--	23.59	24.44	25.39	
Direct Gross Margin -- % Direct Sales	11.3	13.2	13.7	13.9	12.4	13.76	14.18	15.32	14.09	
PERSONNEL PRODUCTIVITY & OPERATING EXPENSE CONTROL PERFORMANCE										
Operating Expense -- % of Gross Margin	90.2	88.4	81.4	85.3	86.9	89.18	90.65	89.02	89.25	
Non-People Expense -- % of Gross Margin	--	--	--	--	--	--	--	--	27.49	
Total Employee Comp. -- % Gross Margin	66.7	63.8	59.0	61.7	65.2	65.62	64.34	63.26	61.40	
Net Sls Per Employee ($000)	85.35	99.52	109.82	123.09	132.64	134.65	139.93	150.82	158.95	
GM Per Employee ($000)	--	--	--	--	--	29.84	30.30	33.70	36.61	
Sls Service & Selling Exp. -- % Gross Margin	37.7	36.7	34.1	35.0	35.9	35.73	36.91	36.15	36.06	

[1] In 1977, only two types of sales were identified - "warehouse" and "direct". In 1978 a new category - "indirect" sales, and margins - was added. Thus the 1977 and earlier data may not be directly comparable to the 1978 and earlier results. However, the 1978 and later results are comparable.

In order to help industrial paper merchant firm managers establish performance goals in the gross margin and expense control areas, survey results for the "upper quartile" and high ROTA profitability group firms are provided in Exhibit 11-A. The upper quartile performance is amazingly similar in both years except for gross margin per employee which was much higher in 1980 at $45,600. The strengths of the high profit industrial paper firms lie partly in obtaining a somewhat higher gross margin on warehouse and indirect sales (24.70% for the high profit firms compared to the 23.30% for the low profit firms, while the middle profit firms had a 26.35% gross margin). In the area of operating expenses, the advantage of the high profit firms is somewhat more consistent. Their operating expenses absorbed only 82.51% of gross profit compared to 96.35% for the low profit firms. The high profit firms had an advantage in both non-people expense control (23.12% of gross profit compared to 29.60% of gross profit for the low profit firms) and in total compensation (61.46% of gross profit compared to 67.90% for the low profit firms).

EXHIBIT 11A

SOME PROFIT MARGIN PERFORMANCE GOALS
FOR
INDUSTRIAL PAPER MERCHANT FIRMS
(Based on 1979 and 1980 data)

Performance Measure	Year	Upper quartile of Industrial Paper Merchant Firms	Median of High ROTA Industrial Paper Merchant Firms*
Warehouse Industrial Paper Gross Trading Margin -- % Warehouse Industrial Paper Sales	1980	28.17	24.70
	1979	28.32	26.04
Direct Printing Paper Gross Trading Margin -- % Direct Printing Paper Sales	1980	19.29	12.89
	1979	19.02	11.89
Operating Expenses -- % Gross Trading Margin	1980	85.16	82.51
	1979	86.00	85.86
Non-People Expenses -- % Gross Margin	1980	23.23	23.12
	1979	23.00	25.00
Total Employee Compensation -- % Gross Trading Margin	1980	57.02	61.46
	1979	56.79	56.15
Gross Margin Per Employee	1980	45,600	37,100
	1979	38,770	36,280

*See Appendix B for a discussion of the ROTA Profitability Group concept.

ASSET MANAGEMENT

The best overall measure of asset management, that is, total asset turnover, was previously presented in Exhibit 10 and is repeated in Exhibit 12 for convenience under the name Net Sales to Total Assets.

The two major asset investments of industrial paper merchant firms are accounts receivable and inventory. The most widely accepted measure of inventory management is Cost of Warehouse Goods Sold To Average Inventory. (Since 1978, Cost of Indirect Goods Sold has been excluded from the calculation of Inventory Turnover.)

Inventory Turnover increased slightly to 6.61 times in 1980 from 6.44 times in 1979. (When the total amount of the LIFO reserve is added back to the inventory investment as shown on the financial statements and the increase in LIFO Reserve during the year is subtracted from warehouse cost of goods sold in order to obtain a LIFO Adjusted measure of inventory turnover, the calculated 1980 industry inventory turn declines from 6.45 times to 5.89 times. Thus, with more and more firms going to LIFO based inventory accounting and with the amounts of LIFO reserves steadily increasing, it would appear that management should consider evaluating inventory turnover performance on a "LIFO Adjusted" (FIFO) basis. Appendix F discusses LIFO adjusting.)

The modest decline in Warehouse Gross Margin was essentially offset by the increase in industry Inventory Turnover. As a result, the Gross Margin Return on Inventory increased slightly to 220.6%.

Average Collection Period decreased about one day to 39.4 days in 1980, which is still near the high point of the range of the past nine years.

Exhibit 12-A presents 1979-80 survey results for the upper quartile and the median high ROTA profitability group of the industrial paper firms, which can be used to develop performance goals for a firm. The upper quartile performance appears to be stable from year to year. The high profit industrial paper merchants do have a rather substantial advantage in asset management (the median asset turnover of the high profit firms is the same as the upper quartile for the industry - 4.[illegible] times).

EXHIBIT 12

ASSET MANAGEMENT PERFORMANCE
FOR
INDUSTRIAL PAPER MERCHANTS
(All Values Are Composite Averages)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
OVERALL ASSET MANAGEMENT:										
Net Sls to Total Assets (X)	3.20	3.32	3.54	3.71	3.69	3.83	4.02	3.93	4.00	
INVENTORY MANAGEMENT:										
Inventory Turnover (X)[1]	6.48	6.78	6.52	6.54	7.45	6.89	7.57	6.44	6.61	
Gross Margin Return on Inventory (%)[2]	200	211	232	222	242	247	243	217	221	
ACCOUNTS RECEIVABLE MANAGEMENT:										
Av. Collection Period (Days)[3]	36	40	35	35	33	36.1	40.1	40.5	39.4	

[1]Inventory Turnover is calculated as "Cost of Warehouse Goods Sold to Average Inventory" (average of beginning and ending inventories for the year). However, remember that the definition of warehouse sales was narrowed to exclude indirect sales in 1978 and and later.

[2]In 1977 "Gross Margin Return on Inventory" was calculated as "Gross Profit Margin on Warehouse Sales" divide by "Average Inventory". The calculation was the same in 1978 and later except that indirect sales were excluded. Thus, only the 1978-80 measures are directly comparable.

[3]The calculation approach used for each measure is defined in Appendix D.

EXHIBIT 12A
SOME ASSET MANAGEMENT PERFORMANCE GOALS
FOR
INDUSTRIAL PAPER MERCHANT FIRMS
(Based on 1979 and 1980 data)

Performance Measure	Year	Upper quartile of Industrial Paper Merchant Firms	Median of High ROTA Industrial Paper Merchant Firms*
Net Sales to Total Assets (times)	1980	4.63	4.63
	1979	4.55	4.31
Industrial Paper Inventory Turnover (times)*	1980	7.92	7.21
	1979	7.87	7.81
Gross Margin Return on Industrial Paper Inventory (%)*	1980	269.4	224.9
	1979	265.3	232.6
Days Sales in Accounts Receivable on Nov. 30 (days)**	1980	31.4	33.6
	1979	32.2	33.2

*Based on warehouse cost of goods sold and gross profit.

**This is a somewhat more precise measure of "collection period" than the "average collection period" which is based on sales for the year. It is calculated by dividing credit sales for Oct. & Nov. by 61 to get a more accurate measure of "average credit sales per day" and then dividing this value into the Nov. 30 trade notes and accounts receivable.

FINANCIAL MANAGMENT

Financial management consists of the management of a firm's capital structure (balancing the sources of funds between debt and equity) and its liquidity management (maintaining the ability to pay current debts as they come due.)

The financial structure of the industrial paper merchant firms has been relatively stable for the last three years. In 1980, Total Debt to Net Worth was up only slightly to 111.2% while Current Debt to Net Worth declined slightly to 71.3%. Thus, the industry appears to have achieved a rough balance between sales growth, asset management, profitability and capital structure.

Similarly, the industry's liquidity position has been relatively stable. Last year the Quick Ratio, or the measure Curent Assets Minus Inventory to Current Liabilities, increased slightly to 1.32 times. Days Payable Outstanding on Dec. 31 delcined to 23.3 days.

In summary, while the sales growth rate of the industrial paper merchants was lower in 1980 than in 1979, it at least kept pace with the rate of paper price inflation and was stronger relative to the printing and dual paper merchants than in earlier years. Profitability improved modestly but consistently across the board. Asset management improved slightly; financial structure and liquididty were stable at their 1978-79 levels.

EXHIBIT 13

FINANCIAL MANAGEMENT
FOR
INDUSTRIAL PAPER MERCHANTS
(All Values Are Medians)

	1977	1978	1979	1980
FINANCIAL STRUCTURE:				
Total Debt to Net Worth (%)	88.4	102.4	108.7	111.2
Current Debt to Net Worth (%)	64.6	74.4	74.4	71.3
ABILITY TO PAY CURRENT DEBTS:				
Current Assets Minus Inventory to Current Liabilities (X)	1.35	1.29	1.24	1.32
Days Payables Outstanding on Dec. 31 (Days)	19.3	22.5	25.1	23.3

CHAPTER FOUR DUAL PAPER MERCHANT PERFORMANCE

Paper merchant firms that do not obtain more than 80% of their sales from the sale of either industrial or printing papers and that specialize in both commodities are called dual merchants. (See Appendix A for information on the dual merchants' contribution to this survey.)

SALES PERFORMANCE

The dual paper merchants achieved a sales increase of only 11.54% in 1980, which was the lowest level of sales increase since 1977.

In 1980, the dual firms participating in the survey moved 55.2% of their sales through the warehouse, 6.4% indirectly and 38.4% directly which was similar to the 1978-79 experience. The average order sizes were substantially higher in 1980.

EXHIBIT 14

SALES PERFORMANCE TRENDS
FOR
DUAL PAPER MERCHANTS
(All Values Are Composite Averages)[1]

Performance Measure	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
% Sls Change Over Prior Year	--	--	--	--	--	11.62	13.03	14.16	11.54	
Whse Sls--% Total Sls[2]	58.7	57.2	53.0	58.9	56.5	58.7	53.3	58.1	55.2	
Indirect Sls-- % Total Sls[2]	--	--	--	--	--	--	6.8	7.1	6.4	
Whse & Indirect Sls -- % Total Sls[2]	--	--	--	--	--	--	59.6	63.1	61.7	
Direct Sls -- % Total Sls[2]	--	--	--	--	--	--	40.44	36.9	38.4	
Average Whse Order Size ($)	102	114	162	167	185	209	212	234	282	
Average Indirect Order Size ($)	--	--	--	--	--	--	513	535	624	
Av. Whse & Indirect Order Size ($)	--	--	--	--	--	--	222	248	298	
Average Direct Order Size ($)	890	1,169	1744	1,693	1,658	2,110	2,266	2,424	2796	

Sources: 1972-1976 Information previously reported in Paper Merchant Performance.
1977-1980 MFI calculated the composite averages.

[1]See Appendix B for a discussion of composite averages, medians and other methodological issues.

[2]The addition of an "indirect sales" category with the 1978 data year reduced the comparability of the 1978-80 sales, gross margin and inventory turnover information with the 1972-77 results. The 1978, 1979 and 1980 data are consistent and comparable. See Appendix E.

PROFITABILITY PERFORMANCE

Exhibit 15 shows the Profitability Model for dual paper merchants. The first column in the exhibit shows that the net profit margin of the dual firms was essentially level in 1980 at 3.42%.

In contrast, total asset turnover (column 2) increased to 4.66 times. The increase in asset turnover coupled with the stable profit margin resulted in an increase in return on total assets to 15.32%.

The financial leverage of the participating firms was slightly lower at 1.84 times in 1980. This is a relatively conservative financial position for a distribution business. As a result of the increase in return on assets and general stability in capital structure, dual paper merchants' return on net worth increased to 28.14% in 1980. Return on capital employed also improved modestly to 24.41%.

EXHIBIT 15

DUAL PAPER MERCHANTS
PROFIT MODEL PERFORMANCE[1]
(Composite Average Values)

	(1) Net Profit Before Tax / Net Sales (%)	× (2) Net Sales / Total Assets (X)	= (3) Net Profit Before Taxes / Total Assets (%)	× (4) Total Assets / Net Worth (X)	= (5) Net Profit Before Tax / Net Worth (%)	(6) Return on Capital Employed[2] (%)
1980	3.42	4.66	15.32	1.84	28.14	24.41
1979	3.41	4.32	14.72	1.87	26.56	23.72
1978	2.85	4.57	12.40	1.94	23.33	20.23
1977	2.65	4.53	12.29	1.90	23.40	20.72
1976	2.71	4.48	12.13	1.98	23.95	19.0
1975	3.53	4.29	15.16	2.29	34.71	25.5
1974	4.29	4.74	20.34	2.04	41.44	34.1
1973	2.73	4.01	10.93	1.78	19.46	18.1
1972	1.88	3.73	7.02	1.65	11.47	10.7

[1]See Appendix C for a discussion of the MFI Profit Model.

[2]"Return on Capital Employed" was defined in 1977 and prior years as "net profit before taxes plus interest on borrowed funds minus income from outside investments" divided by "net worth or owner's equity plus long term debt minus outside investments". In 1978, and later years, "Bank Loans Due in Less Than One Year" was added to the denominator of the ratio (the "capital invested") to recognize that some, if not most, of the total interest paid by the typical paper distributor resulted from bank loans. See Appendix D for a complete definition of the measure.

PROFIT MARGIN MANAGEMENT

Exhibit 16 shows performance measures for the two major dimensions of profit margin management, i.e., for gross margin management and expense control.

The Warehouse Gross Trading Margin of the dual paper firms increased about 0.2% to 23.61% in 1980. This was sufficient to more than offset the modest decline in Indirect Gross Trading Margin (to 17.94%) and as a result Warehouse and Indirect Gross Trading Margin" increased slightly to 23.08% (from 22.9% in 1979). In the same period, Direct Gross Trading Margin declined about one-half percentage point to 8.48%.

Total operating expenses declined slightly to 81.39% of gross margin. Total employee compensation also declined slightly to 57.4% of gross margin while Non-People Expenses" absorbed 24.14% of gross margin. Employee productivity, as measured by Net Sales per Employee, was modestly higher at $242,000. Gross Margin per Employee increased to $44,120. Although a strong conclusion cannot be drawn because of the changes in sample from year to year, it appears that most of the personnel productivity increase in 1980 was due to price increases. Sales Service and Selling Expense To Gross Margin increased to 35.21%. While an increase in selling activities is understandable in a period of weaker business, cost trends in this area should be followed rather carefully.

In the printing and industrial merchant sections of this report, additional survey results are provided as an aid to help managers establish goals for their firms (and/or branches). Because the gross margin, employee productivity, asset management and other performance goals of the dual paper firms are strongly influenced by the printing-industrial mix of paper products handled in any one case, it would potentially be misleading to present similar goals for the dual paper houses as as group. However, dual house managers may wish to refer to Exhibits 6-A and 11-A for gross margin and operating expense control goals and to Exhibits 7-A and 12-A for asset management goals.

EXHIBIT 16

PROFIT MARGIN PERFORMANCE
FOR
DUAL PAPER MERCHANTS
(All Values Are Composite Averages)

GROSS PROFIT MARGIN PERFORMANCE[1]

	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
Warehouse Gross Margin -- % Warehouse Sales	23.2	23.6	25.4	24.5	24.1	22.33	22.45	24.30	25.61	
Indirect Gross Margin -- % Indirect Sales	--	--	--	--	--	--	11.59	14.53	17.94	
Warehouse & Indirect GM -- % Whse & Indirect Sales	--	--	--	--	--	--	22.65	23.98	25.00	
Direct Gross Margin -- % Direct Sales	8.7	8.9	9.2	9.0	8.1	7.90	8.60	8.37	8.48	

PERSONNEL PRODUCTIVITY & OPERATING EXPENSE CONTROL PERFORMANCE

Operating Expense -- % of Gross Margin	89.8	85.4	75.2	81.0	84.3	84.49	83.23	82.12	81.39	
Non-People Expense -- % Gross Margin	--	--	--	--	--	--	--	--	24.14	
Total Employee Comp. -- % Gross Margin	61.8	58.1	52.8	57.4	59.7	59.07	60.76	57.61	57.43	
Net Sls Per Employee ($000)	111	130	167	156	179	141	211	233	242	
Gross Margin Per Employee ($000)	--	--	--	--	--	31.49	35.71	40.69	44.12	
Sales Service & Selling Exp. -- % Gross Margin	35.2	33.7	31.1	33.7	34.7	34.65	34.09	33.26	35.21	

[1]In 1977 only two types of sales were identified - "warehouse" and "direct". In 1978, a new category - "indirect" sales, and margins - was added. Thus the 1977 and earlier data may not be directly comparable to the 1978-80 results. However, the 1978, 1979 and 1980 data are comparable.

ASSET MANAGEMENT PERFORMANCE

Exhibit 17 shows asset, inventory and accounts receivable management measures. Asset turnover, as was shown also in Exhibit 15, increased to 4.66 times.

Dual merchants' Inventory Turnover declined to only 5.02 times in 1980. Given the increasingly higher cost of carrying inventory, this is clearly an area in which management should investigate more thoroughly. Gross Margin Return on Inventory declined to 155.4% last year.

The inventory management area is important. The median high-profit dual firm was able to achieve an Inventory Turnover of 7.97 times in 1980 compared to only 5.78 turns for the median low profit firm. Similarly, the median Warehouse Gross Margin Return on Average Inventory of the high profit firms was 245% versus 175% for the median low profit firm. However, this is somewhat misleading. When the appropriate LIFO Adjustments are made, the advantage of the high profit firm is much smaller -- 154% versus 148% -- for the median low-profit firm.

The industry's receivable management performance has been somewhat stronger. The Average Collection Period declined almost two days to 38.4 days in 1980. This is the third best collection experience of the nine year period.

EXHIBIT 17

ASSET MANAGEMENT PERFORMANCE[1]
FOR
DUAL PAPER MERCHANTS
(All Values Are Composite Averages)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	YOUR FIRM
OVERALL ASSET MANAGEMENT:										
Net Sls to Total Assets (X)	3.73	4.01	4.74	4.29	4.48	4.53	4.57	4.32	4.66	
INVENTORY MANAGEMENT:										
Inventory Turnover (X)[2]	4.97	5.09	5.08	4.70	5.03	5.83	5.72	5.48	5.02	
Gross Margin Return on Inventory (%)[3]	150	156	175	152	151	174.1	165.4	167.3	155.4	
ACCOUNTS RECEIVABLE MANAGEMENT:										
Av. Collection Period (Days)	44	42	35	39	37	39.7	39.6	40.3	38.4	

[1]The calculation approach used for each measure is defined in Appendix D.

[2]Inventory Turnover is calculated as "Cost of Warehouse Goods Sold to Average Inventory" (average of beginning and ending inventories for the year). However, remember that the definition of warehouse sales was narrowed to exclude indirect sales in 1978, 1979, and 1980.

[3]Until 1977 "Gross Margin Return on Inventory" was defined as "Gross Profit Margin on Warehouse Sales" divided by "Average Inventory". The calculation was the same in 1973-80 except that indirect sales were excluded from warehouse sales. Thus, the 1972-77 measures are directly comparable to each other and the 1978-80 measures are directly comparable to each other. However, these two groups of measures are not directly comparable as groups.

FINANCIAL MANAGEMENT

Exhibit 18 shows performance measures related to the two major dimensions of financial management: capital structure (the balancing of the sources of funds between debt and equity) and liquidity management (the maintenance of the ability to pay current debts as they come due.)

The financial structure of the median dual firm was very stable from 1979 to 1980. Total Debt to Net Worth declined very slightly to 101.2% while Current Debt to Net Worth increased modestly to 76.4%.

As a result of the slower rate of sales growth, substantial improvement in asset management and maintenance of a reasonable level of profitability, industry liquidity improved in 1980. The Quick Ratio (Current Assets minus Inventory to Current Debt) increased to 1.51 times. Similarly, Days Payable Outstanding on Dec. 31 declined to a four year low of 19.8 days in 1980.

In summary, the sales growth rate of the dual paper merchants declined to 11.54% in 1980, which was about the same as the rate of paper price increases during the year. Profit margin was stable while asset turnover improved to 4.66 times. As a result, all measures of Return On Investment (i.e., Return On Assets, Return On Net Worth and Return On Capital Employed) improved to their best level since the 1974-75 period. This is a solid performance when the weaker economic conditions that prevailed in the later part of 1980 are considered.

EXHIBIT 18

FINANCIAL MANAGEMENT
FOR
DUAL PAPER MERCHANTS
(All Values Are Medians)[1]

	1977	1978	1979	1980
FINANCIAL STRUCTURE:				
Total Debt to Net Worth (%)	85.26	89.84	102.87	101.19
Current Debt to Net Worth (%)	79.78	68.50	74.44	76.41
ABILITY TO PAY CURRENT DEBTS:				
Current Assets Minus Inventory to Current Liabilities (X)	1.29	1.44	1.57	1.51
Days Payables Outstanding on Dec. 31 (Days)	21.7	20.5	21.5	19.8

[1]See Appendix B for a discussion of composite averages, medians and other methodological issues.

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ABBREVIATIONS USED IN TABLES

Accts Rec	= accounts receivable
Exp	= expense
GM	= gross margin, gross trading margin
Inv	= inventory
IP	= industrial paper
%	= percent
PP	= printing paper
NPBT	= net profit before taxes
Sls	= sales
Whse	= warehouse

TABLE 1

MERCHANT COMMODITY GROUPS**
PERFORMANCE MEASURES** (COMPOSITE AVERAGES*)
SUMMARIZING 1980 OPERATIONS

Performance Measure	All Paper Merchants	All Printing Paper Merchants	All Industrial Paper Merchants	All Dual Paper Merchants
1. Return on Capital Employed (%)	23.71	24.78	18.11	24.41
2. NPBT as % Net Worth (%).....	27.66	29.02	21.64	28.14
3. Total Assets to Net Worth (X)	1.92	1.94	2.12	1.84
4. NPBT as % Total Assets.....	14.39	14.89	10.17	15.32
5. NPBT as % Net Sales (%).....	3.24	3.25	2.55	3.42
6. Net Sales to Total Assets (X)	4.52	4.58	3.98	4.66
7. Whse GM as % Whse Sls (%)	24.09	24.46	24.97	23.61
8. Whse & Indirect GM as % Whse & Indirect Sls.....	23.86	24.19	25.39	23.08
9. Direct GM as % Direct Sls	8.26	7.51	14.09	8.48
10. Whse & Indirect Sls as % Total Sls	57.42	47.23	79.39	81.43
11. % Sls Change Over Prior Year (%)	9.74	7.49	11.73	11.54
12. Net Sales Per Employee ($000)	258.29	330.13	158.86	242.48
13. GM Per Employee ($000)	45.26	51.25	36.56	44.12
14. Total Payroll as % GM (%)	48.38	46.51	53.81	48.06
15. Sls Service & Selling Exp as % GM (%)..	35.50	35.74	35.93	35.16
16. Total Operating Exp as % GM (%)	81.71	79.03	89.18	81.39
17. Inv Turnover (Whse Only; X)	5.23	5.15	6.61	5.02
18. GM Return on Inv (Whse Only; %)	166.06	166.54	220.57	155.39
19. Days Sls in Accts Rec on Nov 30 (Days)	38.61	42.29	36.81	35.76

*Appendix B sets forth the formation and measure of merchant commodity groups.

**Appendix D defines the performance measures.

TABLE 2A

PRINTING PAPER MERCHANTS'
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING ALL FIRMS AND PROFITABILITY (ROTA**) GROUPS

Performance Measure	Your Firm	All Printing Paper Merchants	Return on Total Asset Groups for All Printing Paper Merchants**		
			Low Profit Firms	Middle Profit Firms	High Profit Firms
1. Return on Capital Employed (%)		23.69	11.84	23.62	36.20
2. NPBT as % Net Worth (%)		26.29	9.18	25.58	46.91
3. Total Assets to Net Worth (X)		2.13	3.14	1.95	1.68
4. NPBT as % Total Assets (%)		13.38	3.90	13.38	24.34
5. NPBT as % Net Sales (%)		2.75	1.04	2.73	5.68
6. NPBT as % Net Sls (LIFO Adj;%)		2.85	1.36	2.98	5.75
7. Net Sales to Total Assets (X)		4.38	3.86	4.53	4.60
8. Whse PP GM as % Whse PP Sls (%)		25.08	24.58	24.61	25.46
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls (%)		24.72	23.39	24.72	25.73
10. Direct PP GM as % Direct & PP Sls (%)		7.79	8.25	7.67	7.60
11. Whse & Indirect Sls as % Total Sls (%)		54.49	57.04	51.85	56.60
12. % Sls Change Over Prior Year (%)		10.28	8.26	9.89	12.42
13. Net Sales Per Employee ($000)		286.91	262.60	290.60	322.20
14. GM Per Employee ($000)		51.00	42.85	51.28	53.97
15. Total Payroll as % GM (%)		45.19	53.16	46.95	42.08
16. Sls Service & Selling Exp as % GM (%)		34.44	39.39	37.11	31.34
17. Total Operating Exp as % GM (%)		80.99	90.59	81.12	70.24
18. PP Inv Turnover (Whse Only; X)		5.38	5.00	5.54	5.65
19. GM Return on PP Inv (Whse Only, %)		178.68	163.94	198.13	174.32
20. Day Sls in Accts Rec on Nov 30 (Days)		42.01	41.38	44.10	42.62

*Appendix D defines the performance measures.

**Appendix B sets forth the formation and measure of profitability groups, namely, of Return on Total Assets (ROTA) groups.

TABLE 2B

PRINTING PAPER MERCHANTS'
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING SALES VOUME AND EMPHASIS GROUPS**

Performance Measure	Your Firm	Sales Volume Groups				Warehouse, Indirect & Direct Sales Emphasis Groups			
		Under $8MM	$8 to $15MM	$15 to $40MM	$40MM & Over	Over 70% Direct	30-55% Whse & Indirect	55-70% Whse & Indirect	70+% Whse & Indirect
1. Return on Capital Employed (%)		24.87	14.85	20.11	28.11	29.50	23.77	22.57	21.38
2. NPBT as % Net Worth (%)		26.55	15.04	23.96	31.46	37.96	25.13	21.03	22.67
3. Total Assets to Net Worth (X)		1.90	2.55	2.28	2.47	3.04	1.89	1.87	2.36
4. NPBT as % Total Assets (%)		13.53	7.90	13.31	14.66	12.53	13.88	11.76	13.46
5. NPBT as % Net Sales (%)		3.46	2.32	2.17	3.34	1.95	2.72	3.45	3.57
6. NPBT as % Net Sls (LIFO Adj;%)		3.51	2.51	2.72	3.34	2.11	3.00	3.45	4.04
7. Net Sales to Total Assets (X)		3.93	4.02	4.69	4.61	6.63	4.78	3.83	3.71
8. Whse PP GM as % Whse PP Sls (%)		27.36	25.50	24.45	24.33	21.99	25.89	25.67	25.03
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls (%)		27.18	24.67	23.82	24.96	24.68	24.42	24.75	25.49
10. Direct PP GM as % Direct % PP Sls (%)		8.35	8.47	7.63	7.40	7.29	7.34	8.29	9.37
11. Whse & Indirect Sls as % Total Sls (%)		63.64	58.36	52.17	42.11	18.74	46.00	61.37	81.71
12. % Sls Change Over Prior Year (%)		11.86	9.34	10.63	9.21	6.63	6.02	12.63	17.66
13. Net Sales Per Employee ($000)		215.39	263.10	337.37	427.08	679.06	351.45	262.00	193.50
14. GM Per Employee ($000)		48.14	47.55	51.49	54.83	73.75	51.06	49.23	43.38
15. Total Payroll as % GM (%)		44.36	45.49	44.24	44.39	49.90	45.17	42.44	44.62
16. Sls Service & Selling Exp as % GM (%)		30.35	38.62	33.82	37.11	43.85	34.27	35.15	33.09
17. Total Operating Exp as % GM (%)		81.19	83.97	84.35	76.17	79.02	81.16	83.35	81.39
18. PP Inv Turnover (Whse Only; X)		4.25	6.31	5.80	4.86	7.01	5.01	5.69	5.36
19. GM Return on PP Inv (Whse Only, %)		171.01	205.60	200.45	152.91	193.82	175.76	197.90	157.53
20. Day Sls in Accts Rec on Nov 30 (Days)		43.87	41.78	41.16	42.93	43.50	42.48	40.59	41.99

*Appendix D defines the performance measures.

**Appendix B sets forth the formation amd measure of sales volume and emphasis groups.

Table 2C

PRINTING PAPER MERCHANTS'

PERFORMANCE MEASURES* (MEDIAN VALUES**)

SUMMARIZING NPTA REGIONAL GROUPS

NPTA Regions

Region 1: CT, ME, MA, NH, RI & VT

Region 2: DE, DC, MD, NJ, NY & PA

Region 3: AL, FL, GA, NC, SC, TN, & VA

Region 4: IL, IN, KY, MI, MO, OH, WV, & WI

Region 5: CO, IA, KS, MN, MT, NE, ND, SD & WY

Region 6: AK, AZ, CA, HI, ID, NV, NM, OR, UT & WA

Region 7: AR, LA, MS, OK & TX

Performance Measure	YOUR FIRM	Regional Groups for All Printing Paper Merchants						
		Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7
1. Return on Capital Employed		29.30	27.34	24.43	20.67	23.70	26.29	26.07
2. NPBT as % Net Worth (%)		44.44	26.71	31.70	18.87	29.56	29.43	20.06
3. Total Assets to Net Worth (X)		2.28	2.71	2.44	1.84	2.02	2.30	1.77
4. NPBT as % Total Assets (%)		14.84	13.06	12.84	11.41	9.60	19.21	16.05
5. NPBT as % Net Sales (%)		3.16	2.06	3.05	2.72	2.41	4.49	6.38
6. NPBT as % Net Sales (LIFO Adj;%)		3.51	2.34	3.89	2.77	2.41	5.31	6.38
7. Net Sls to Total Assets (X)		4.85	4.69	4.18	4.39	4.26	3.70	3.30
8. Whse PP GM as % Whse PP Sls		N.C.+	22.94	25.48	25.91	26.93	24.99	N.C.+
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls		24.94	23.72	25.25	25.01	25.79	24.36	25.03
10. Direct PP GM as % Direct PP Sls		7.43	7.52	7.96	8.35	7.28	6.73	6.95
11. Whse Indirect Sls as % Total Sls		57.30	44.55	74.11	52.92	56.95	63.33	77.02
12. % Sls Change Over Prior Year (%)		11.04	6.02	17.13	4.97	14.97	21.81	28.30
13. Net Sales Per Employee ($000)		345.06	370.95	239.23	272.69	N.C.+	279.11	166.65
14. GM per Employee ($000)		58.04	54.98	41.07	48.62	N.C.	55.34	35.83
15. Total Payroll as % GM (%)		44.66	45.39	43.80	45.21	48.79	40.48	44.62
16. Sls Service & Selling Exp as % GM		31.97	36.85	33.09	34.78	43.62	29.03	31.72
17. Total Operating Exp as % GM		75.50	83.53	80.64	82.01	77.98	76.55	66.81
18. PP Inv. Turnover (Whse Only; X)		N.C.	5.46	5.18	5.69	4.14	5.58	N.C.
19. GM Return on PP Inv. (Whse Only; %)		N.C.	182.65	138.10	201.53	155.83	194.33	N.C.
20. Days Sls in Accts Rec on Nov. 30 (Days)		45.64	43.55	40.72	39.97	45.07	35.87	N.C.

*Appendix D defines the performance measures.

**Appendix B discusses median values.

+Performance measure not calculated if less than four firms reported the data needed to make the calculation.

TABLE 3A

INDUSTRIAL PAPER MERCHANTS'
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING ALL FIRMS AND PROFITABILITY (ROTA**) GROUPS

Performance Measure	Your Firm	All Printing Paper Merchants	Return on Total Asset Groups for All Printing Paper Merchants**		
			Low Profit Firms	Middle Profit Firms	High Profit Firms
1. Return on Capital Employed (%)		17.39	7.10	17.39	28.36
2. NPBT as % Net Worth (%)		20.50	4.63	20.20	29.12
3. Total Assets to Net Worth (X)		2.11	3.07	2.49	1.46
4. NPBT as % Total Assets (%)		9.66	2.06	9.66	18.22
5. NPBT as % Net Sales (%)		2.60	.48	2.60	4.60
6. NPBT as % Net Sls (LIFO Adj;%)		2.88	.86	2.86	4.74
7. Net Sales to Total Assets (X)		3.92	3.84	3.85	4.21
8. Whse IP GM as % Whse IP Sls (%)		25.37	23.02	26.52	23.83
9. Whse & Indirect IP GM as % Whse & Indirect IP Sls (%)		25.37	23.32	26.35	24.70
10. Direct IP GM as % Direct % IP Sls (%)		13.24	15.39	13.24	12.89
11. Whse & Indirect Sls as % Total Sls (%)		85.91	85.26	84.75	88.65
12. % Sls Change Over Prior Year (%)		11.59	8.29	10.96	15.16
13. Net Sales Per Employee ($000)		162.19	157.16	157.38	174.06
14. GM Per Employee ($000)		35.94	34.26	36.92	37.10
15. Total Payroll as % GM (%)		53.86	58.93	52.61	53.68
16. Sls Service & Selling Exp as % GM (%)		35.50	40.60	33.39	34.03
17. Total Operating Exp as % GM (%)		89.32	96.34	89.38	82.51
18. IP Inv Turnover (Whse Only; X)		6.45	6.12	5.86	7.21
19. GM Return on IP Inv (Whse Only, %)		221.46	213.00	214.44	224.94
20. Day Sls in Accts Rec on Nov 30 (Days)		36.62	41.26	36.79	33.60

*Appendix D defines the performance measures.

**Appendix B sets forth the formation and measure of profitability groups, namely, of Return on Total Assets (ROTA) groups.

TABLE 3B

INDUSTRIAL PRINTING PAPER MERCHANTS†
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING SALES VOUME AND EMPHASIS GROUPS**

Performance Measure	Your Firm	Sales Volume Groups				Warehouse-Indirect Sales Emphasis Groups		
		Under $3.0MM	$3.0 to $5.5MM	$5.5 to $10MM	Over $10MM	Under 75% Whse & Indirect	75% to 90% Whse & Indirect	90% or More Whse & Indirect
1. Return on Capital Employed (%)		21.44	14.26	17.82	18.58	20.65	14.99	17.82
2. NPBT as % Net Worth (%)		17.73	17.30	22.56	21.43	22.34	18.03	20.44
3. Total Assets to Net Worth (X)		1.67	2.51	1.99	1.87	2.13	2.49	1.67
4. NPBT as % Total Assets (%)		10.32	9.07	10.11	9.66	10.11	8.88	12.78
5. NPBT as % Net Sales (%)		3.09	2.43	2.72	2.21	2.33	1.88	3.36
6. NPBT as % Net Sls (LIFO Adj;%)		3.46	2.60	2.72	2.82	2.45	2.07	3.63
7. Net Sales to Total Assets (X)		3.88	3.62	4.02	4.30	4.33	3.99	3.87
8. Whse IP GM as % Whse IP Sls (%)		25.37	26.16	26.13	21.61	26.63	25.41	24.25
9. Whse & Indirect IP GM as % Whse & Indirect IP Sls (%)		26.38	25.72	25.93	24.06	25.57	24.63	25.93
10. Direct IP GM as % Direct % IP Sls (%)		12.90	14.03	16.57	12.99	13.02	14.03	12.89
11. Whse & Indirect Sls as % Total Sls (%)		94.38	88.93	78.76	78.51	67.80	84.67	98.12
12. % Sls Change Over Prior Year (%)		11.86	15.58	10.73	11.48	10.58	10.49	12.79
13. Net Sales Per Employee ($000)		137.20	152.70	174.67	185.26	206.58	154.35	133.16
14. GM Per Employee ($000)		33.59	33.46	37.96	37.99	41.90	34.40	31.85
15. Total Payroll as % GM (%)		50.93	54.08	55.49	53.34	54.07	54.25	52.70
16. Sls Service & Selling Exp as % GM (%)		31.37	35.95	38.78	35.30	42.68	35.58	30.84
17. Total Operating Exp as % GM (%)		87.39	90.37	90.36	88.92	89.00	92.35	87.95
18. IP Inv Turnover (Whse Only; X)		7.21	5.92	5.83	7.59	5.99	6.45	7.25
19. GM Return on IP Inv (Whse Only, %)		244.82	203.21	207.00	224.94	218.74	217.99	240.68
20. Day Sls in Accts Rec on Nov 30 (Days)		30.62	42.85	39.27	33.57	35.29	39.00	33.17

*Appendix D defines the performance measures.

**Appendix B sets forth the formation amd measure of sales volume and emphasis groups.

TABLE 3C

INDUSTRIAL PAPER MERCHANTS'

PERFORMANCE MEASURES* (MEDIAN VALUES**)

SUMMARIZING NPTA REGIONAL GROUPS

NPTA Regions

Region 1: CT, ME, MA, NH, RI & VT
Region 2: DE, DC, MD, NJ, NY & PA
Region 3: AL, FL, GA, NC, SC, TN, & VA
Region 4: IL, IN, KY, MI, MO, OH, WV, & WI
Region 5: CO, IA, KS, MN, MT, NE, ND, SD & WY
Region 6: AK, AZ, CA, HI, ID, NV, NM, OR, UT & WA
Region 7: AR, LA, MS, OK & TX

Performance Measure	YOUR FIRM	Regional Groups for All Dual Paper Merchants						
		Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7
1. Return on Capital Employed		N.C.+	14.72	21.90	18.18	23.13	16.15	17.43
2. NPBT as % Net Worth (%)		22.96	17.36	24.51	22.34	22.15	18.18	22.21
3. Total Assets to Net Worth (X)		2.43	2.51	1.52	1.73	1.79	2.94	1.55
4. NPBT as % Total Assets (%)		9.82	8.99	11.90	13.50	11.90	5.51	14.83
5. NPBT as % Net Sales (%)		2.53	2.43	2.98	3.08	2.95	1.23	3.64
6. NPBT as % Net Sales (LIFO Adj;%)		2.90	2.90	2.42	3.36	3.61	1.66	3.94
7. Net Sls to Total Assets (X)		3.82	3.83	3.85	4.19	4.23	4.48	3.81
8. Whse IP GM as % Whse IP Sls		N.C.	25.93	24.32	23.59	N.C.+	28.93	24.06
9. Whse & Indirect IP GM as % Whse & Indirect IP Sls		N.C.	24.63	26.76	23.59	24.77	26.58	28.01
10. Direct IP GM as % Direct IP Sls		N.C.	13.01	12.39	13.80	N.C.	17.81	19.29
11. Whse & Indirect Sls as % Total Sls		N.C.	85.91	70.89	87.53	90.45	76.32	92.92
12. % Sls Change Over Prior Year (%)		12.06	10.49	14.60	8.77	16.74	19.35	13.83
13. Net Sales Per Employee ($000)		146.61	154.35	166.27	181.78	144.27	140.44	121.29
14. GM per Employee ($000)		33.24	36.61	36.02	39.04	34.68	42.86	28.58
15. Total Payroll as % GM (%)		50.30	53.46	53.18	53.92	52.22	55.32	56.05
16. Sls Service & Selling Exp as % GM		N.C.	32.79	35.74	38.47	38.44	43.52	28.58
17. Total Operating Exp as % GM		89.17	89.03	87.75	88.38	87.95	93.53	86.21
18. IP Inv. Turnover (Whse Only; X)		N.C.	5.76	5.30	6.49	N.C.	5.87	7.47
19. GM Return on IP Inv. (Whse Only; %)		N.C.	187.87	214.44	197.87	N.C.	239.34	247.64
20. Days Sls in Accts Rec on Nov. 30 (Days)		N.C.	39.53	33.90	33.23	27.51	44.50	30.55

*Appendix D defines the performance measures.

**Appendix B discusses median values.

+Performance measure not calculated if less than four data support the calculation.

TABLE 4A

DUAL MERCHANTS'
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING ALL FIRMS AND PROFITABILITY (ROTA**) GROUPS

Performance Measure	Your Firm	All Dual Paper Merchants	Return on Total Asset Groups for All Dual Paper Merchants: Low Profit Firms	Middle Profit Firms	High Profit Firms
1. Return on Capital Employed		22.71	14.44	23.03	30.83
2. NPBT as % Net Worth (%)		28.13	13.71	30.13	32.14
3. Total Assets to Net Worth (X)		1.84	2.69	1.83	1.54
4. NPBT as % Total Assets (%)		14.87	5.16	14.87	21.77
5. NPBT as % Net Sales (%)		3.53	1.26	3.39	4.98
6. NPBT as % Net Sales (LIFO Adj;%)		3.74	1.61	3.51	5.02
7. Net Sales to Total Assets (X)		4.35	4.22	4.31	4.56
8. Whse PP GM as % Whse PP Sls		25.37	23.08	24.59	26.07
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls		24.63	22.65	24.78	24.44
10. Direct PP GM as % Direct PP Sls		8.56	8.99	8.34	8.29
11. Whse IP GM as % Whse IP Sls (%)		22.91	21.67	23.28	22.56
12. Whse & Indirect IP GM as % Whse & Indirect IP Sls (%)		22.83	21.81	23.08	23.07
13. Direct IP GM as % Direct IP Sls (%)		12.60	11.86	13.48	12.39
14. Whse & Indirect Sls as % Total Sls (%)		71.93	71.56	77.48	70.67
15. % Sls Change Over Prior Year (%)		10.01	9.83	11.48	9.61
16. Net Sales Per Employee ($000)		221.75	178.41	199.87	281.27
17. GM per Employee ($000)		45.73	36.62	42.87	47.58
18. Total Payroll as % GM (%)		46.09	52.12	50.23	45.43
19. Sls Service & Selling Exp as % GM		33.43	37.05	34.48	31.91
20. Total Operating Exp as % GM (%)		82.04	88.87	84.59	75.34
21. PP Inv Turnover (Whse Only; X)		6.31	5.24	7.03	8.00
22. GM Return on PP Inv (Whse Only; %)		222.83	164.58	283.45	253.51
23. IP Inv Turnover (Whse Only; X)		6.44	5.96	7.18	7.99
24. GM Return on IP Inv (Whse Only; %)		195.21	157.35	228.03	233.38
25. Days Sls In Accts Rec on Nov. 30 (Days)		36.06	42.52	37.79	36.09

*Appendix D defines the performance measures.

**Appendix B sets forth the formation and measure of profitability groups, namely, of Return on Total Assets (ROTA) groups.

TABLE 4B

DUAL MERCHANTS'
PERFORMANCE MEASURES* (MEDIAN VALUES**)
SUMMARIZING SALES VOUME AND EMPHASIS GROUPS**

Performance Measure	Your Firm	Sales Volume Groups			Warehouse-Indirect Sales Emphasis Groups		
		Under $10MM	$10 to $50MM	$50MM & Over	Under 60% Whse & Indirect	60% to 75% Whse & Indirect	75% or More Whse & Indirect
1. Return on Capital Employed		18.37	23.03	24.31	27.96	18.33	26.02
2. NPBT as % Net Worth (%)		22.60	24.54	29.76	29.67	20.38	29.99
3. Total Assets to Net Worth (X)		2.76	1.63	1.59	1.62	2.58	2.31
4. NPBT as % Total Assets (%)		22.60	24.54	29.76	17.31	11.35	14.92
5. NPBT as % Net Sales (%)		3.57	3.95	3.30	3.60	2.69	3.57
6. NPBT as % Net Sales (LIFO Adj;%)		3.71	4.40	3.03	4.14	3.40	3.98
7. Net Sales to Total Assets (X)		3.47	4.37	5.01	4.95	4.79	4.22
8. Whse PP GM as % Whse PP Sls		26.84	24.27	25.44	23.79	24.74	26.50
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls		25.45	23.48	24.00	23.48	24.75	25.17
10. Direct PP GM as % Direct PP Sls		9.96	7.96	8.02	7.87	8.55	9.89
11. Whse IP GM as % Whse IP Sls (%)		23.62	23.17	22.27	21.57	23.11	22.88
12. Whse & Indirect IP GM as % Whse & Indirect IP Sls (%)		24.69	22.63	21.86	21.32	22.88	23.29
13. Direct IP GM as % Direct IP Sls (%)		14.05	12.05	11.59	10.08	12.59	13.67
14. Whse & Indirect Sls as % Total Sls (%)		80.53	66.05	69.30	52.02	68.62	83.04
15. % Sls Change Over Prior Year (%)		8.76	9.83	14.14	11.26	9.65	9.10
16. Net Sales Per Employee ($000)		173.33	256.11	225.92	321.78	226.38	172.47
17. GM per Employee ($000)		38.83	49.71	44.01	52.16	46.56	40.27
18. Total Payroll as % GM (%)		45.81	45.78	49.18	45.43	46.08	47.36
19. Sls Service & Selling Exp as % GM		30.13	34.64	35.05	34.97	32.70	31.09
20. Total Operating Exp as % GM (%)		82.65	79.29	80.01	77.94	84.38	82.65
21. PP Inv Turnover (Whse Only; X)		7.56	7.09	4.44	5.09	7.19	6.47
22. GM Return on PP Inv (Whse Only; %)		274.42	240.32	143.80	161.87	235.41	220.33
23. IP Inv Turnover (Whse Only; X)		6.44	7.03	5.29	6.31	6.75	6.33
24. GM Return on IP Inv (Whse Only; %)		193.55	230.78	154.32	156.58	207.49	172.69
25. Days Sls in Accts Rec on Nov. 30 (Days)		39.15	35.62	35.84	36.59	35.65	37.07

*Appendix D defines the performance measures.

**Appendix B sets forth the formation and measure of sales volume and emphasis groups.

TABLE 4C

DUAL PAPER MERCHANTS'

PERFORMANCE MEASURES* (MEDIAN VALUES**)

SUMMARIZING NPTA REGIONAL GROUPS

NPTA Regions

Region 1: CT, ME, MA, NH, RI & VT

Region 2: DE, DC, MD, NJ, NY & PA

Region 3: AL, FL, GA, NC, SC, TN, & VA

Region 4: IL, IN, KY, MI, MO, OH, WV, & WI

Region 5: CO, IA, KS, MN, MT, NE, ND, SD & WY

Region 6: AK, AZ, CA, HI, ID, NV, NM, OR, UT & WA

Region 7: AR, LA, MS, OK & TX

Performance Measure	YOUR FIRM	Regional Groups for All Dual Paper Merchants						
		Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7
1. Return on Capital Employed		N.C.+	25.97	19.38	24.31	22.03	23.98	N.C.+
2. NPBT as % Net Worth (%)		N.C.	25.02	25.21	26.02	22.03	30.33	N.C.
3. Total Assets to Net Worth (X)		N.C.	2.79	1.76	1.62	1.51	1.66	N.C.
4. NPBT as % Total Assets (%)		N.C.	14.84	11.97	16.05	13.28	14.15	N.C.
5. NPBT as % Net Sales (%)		N.C.	3.30	2.55	3.61	3.68	3.21	4.45
6. NPBT as % Net Sales (LIFO Adj;%)		N.C.	4.14	2.55	3.51	3.68	4.79	4.45
7. Net Sales to Total Assets (X)		N.C.	4.97	4.33	4.62	3.91	4.26	N.C.
8. Whse PP GM as % Whse PP Sls		N.C.	24.14	22.88	24.74	28.47	26.06	26.96
9. Whse & Indirect PP GM as % Whse & Indirect PP Sls		N.C.	23.57	23.13	24.34	25.46	24.43	26.24
10. Direct PP GM as % Direct PP Sls		N.C.	9.66	10.45	9.07	8.05	7.26	9.04
11. Whse IP GM as % Whse IP Sls (%)		N.C.	23.33	22.62	23.38	23.00	21.20	23.22
12. Whse & Indirect IP GM as % Whse & Indirect IP Sls (%)		N.C.	22.84	22.59	23.10	24.06	21.32	23.65
13. Direct IP GM as % Direct IP Sls (%)		N.C.	13.52	12.23	11.70	13.28	10.44	12.74
14. Whse & Indirect Sls as % Total Sls (%)		N.C.	75.13	77.22	62.48	72.15	75.21	70.25
15. % Sls Change Over Prior Year (%)		N.C.	12.88	13.40	6.26	7.06	11.05	9.65
16. Net Sales Per Employee ($000)		N.C.	211.47	169.30	252.27	214.53	221.75	221.75
17. GM per Employee ($000)		N.C.	47.32	34.30	47.58	43.46	43.24	44.94
18. Total Payroll as % GM (%)		N.C.	45.94	31.28	45.43	47.12	43.94	44.19
19. Sls Service & Selling Exp as % GM		N.C.	32.39	36.81	33.78	34.43	31.04	32.30
20. Total Operating Exp as % GM (%)		N.C.	82.75	85.35	81.32	84.14	79.82	80.51
21. PP Inv Turnover (Whse Only; X)		N.C.	8.90	N.C.+	5.50	6.23	N.C.+	6.23
22. GM Return on PP Inv (Whse Only; %)		N.C.	297.49	N.C.	191.81	228.76	N.C.	240.32
23. IP Inv Turnover (Whse Only; X)		N.C.	8.22	N.C.	6.21	4.37	N.C.	5.97
24. GM Return on IP Inv (Whse Only; %)		N.C.	247.12	N.C.	172.69	195.21	N.C.	199.18
25. Days Sls in Accts Rec on Nov. 30 (Days)		N.C.	42.49	34.98	36.59	34.57	37.07	32.10

*Appendix D defines the performance measures.

**Appendix B discusses median values.

+Performance measure not calculated if less than four data support the calculation.

TABLE 5

CONDENSED OPERATING STATEMENTS
FOR
PRINTING, INDUSTRIAL & DUAL PAPER MERCHANTS
(Composite Averages & Medians -- % of Net Sales*)

Operating Statement	All Printing Paper Merchants		All Industrial Paper Merchants		All Dual Paper Merchants	
	Composite Average	Median	Composite Average	Median	Composite Average	Median
Total Sales (%)	100.00	100.00	100.00	100.00	100.00	100.00
Total Cost of Goods Sold (%)	84.65	82.96	77.06	77.14	82.52	79.78
Gross Trading Margin (%)	15.35	17.05	22.94	22.86	17.48	20.22
Total Operating Expenses (%)	12.13	13.46	20.46	20.55	14.22	16.13
Net Operating Profit (%)	3.22	3.06	2.48	2.58	3.25	3.70
FINANCIAL GAINS:						
Cash Discounts Earned (%)	1.46	1.44	1.00	0.96	1.27	1.24
Income From Outside Investments (%)	0.05	0.00	0.14	0.00	0.03	0.00
All Other Gains (%)	0.20	0.11	0.21	0.14	0.21	0.05
Total Financial Gains (%)	1.71	1.61	1.33	1.13	1.50	1.39
FINANCIAL LOSSES:						
Cash Discounts Allowed (%)	1.14	1.12	0.51	0.46	0.99	1.00
Interest on Borrowed Capital (%)	0.49	0.36	0.51	0.48	0.26	0.31
All Other Losses (%)	0.06	0.00	0.26	0.00	0.09	0.01
Total Financial Losses (%)	1.69	1.67	1.23	1.03	1.34	1.49
Net Financial Gain or Loss (%)	0.01	-0.14	0.10	0.21	0.17	-0.17
Net Profit Before Taxes (%)	3.25	2.75	2.55	2.60	3.42	3.53
Corporate Income Taxes (%)	1.35	1.12	0.94	0.75	1.64	1.59
Net Profit After Taxes (%)	1.84	1.61	1.47	1.61	1.82	1.98

*See Appendix B for a discussion of survey methodolgy.

TABLE 6

COMPOSITE BALANCE SHEETS
FOR
PRINTING, INDUSTRIAL & DUAL PAPER MERCHANTS
(Sales Weighted Averages - % of Total Assets)

Balance Sheet	All Printing Paper Merchants	All Industrial Paper Merchants	All Dual Paper Merchants
ASSETS:			
Cash & Marketable Securities	2.59	4.48	0.64
Accounts & Notes Receivable, Trade	55.42	42.37	50.13
Inventory	29.54	36.14	35.86
Other Current Assets	1.90	2.04	0.68
Total Current Assets	89.11	85.03	87.31
Net Fixed Assets	7.97	11.63	9.94
Outside Investments	1.74	1.73	0.47
Other Non-Current Assets	1.28	1.78	2.34
Total Assets	100.00	100.00	100.00
LIABILITIES AND NET WORTH			
Accounts Payable	24.95	23.16	21.46
Bank Loans (Less Than One Year)	9.98	7.36	5.72
Other Current Liabilities	6.62	8.93	9.01
Total Current Liabilities	42.75	39.31	36.85
Long Term Liabilities	11.16	14.06	11.61
Capital & Surplus (Equity)	49.09	46.63	53.10
Total Liabilities & Net Worth	100.00	100.00	100.00

APPENDIX A

CHARACTERISTICS OF THE PARTICIPANTS IN THE NPTA/MFI 1977-80 ANNUAL PERFORMANCE SURVEYS

	1977	1978	1979	1980
Number of Survey Forms in the Data Base				
Printing Emphasis	52	76	94	102
Industrial Emphasis	60	80	103	81
Dual Emphasis	48	55	77	63
TOTAL	160	211	274	246
Median Sales of Participants ($000)				
Printing Emphasis	12,422	12,799	12,160	16,096
Industrial Emphasis	4,377	3,899	4,617	6,440
Dual Emphasis	14,572	14,578	13,852	14,428
Total Sales of Participants ($000)				
Printing Emphasis	986,512	1,470,211	2,002,022	2,666,498
Industrial Emphasis	431,173	529,838	727,101	732,080
Dual Emphasis	2,345,435	2,768,496	3,197,200	2,652,981
TOTAL	3,763,120	4,768,544	5,926,323	6,051,559
Percentage of Total Sales Represented By Each Group				
Printing Emphasis	26.21%	30.83%	33.78%	44.06%
Industrial Emphasis	11.46%	11.11%	12.27%	12.10%
Dual Emphasis	62.33%	58.06%	53.95%	43.84%
TOTAL	100.00%	100.00%	100.00%	100.00%

Total Net Sales in NPTA 1980 Data Base ..... $6.1 billion

Total Survey Forms in NPTA 1980 Data Base..... 246

Total Corporate Forms in NPTA 1980 Data Base 179
Co's, Reported on a Single Form 165
Co's Reported on a Branch Basis 14

Dual Paper Merchants (1980)

Total Net Sales in Dual Data Base ..... $2.7 billion
Total Survey Forms in Dual Data Base 63
Total Companies Represented 37
Single Form 27
Branch Basis 10

Industrial Paper Merchants (1980)
Total Net Sales in Industrial Data Base ..... $0.7 billion
Total Survey Forms in Industrial Data Base 81
Total Companies Represented 80
Single Form 77
Branch Basis 3

Print Paper Merchants (1980)
Total Net Sales in Print Data Base ..... $2.7 billion
Total Survey Forms in Print Data Base 102
Total Companies Represented 72
Single Form 61
Branch Basis 11

Appendix B

SURVEY METHODOLOGY

For 1976 and prior years, the NPTA Survey results published in Paper Merchant Performance were developed from data submitted by the member firms to Price Waterhouse & Company. Price Waterhouse accumulated this financial information and submitted "summary totals" and "certain averages" to NPTA. The summary data were grouped and developed by NPTA. (See page 68 of the 1977 edition of Paper Merchant Performance for details.)

For 1977-1980, all data were submitted to Management Foresight, Inc. (MFI) of Columbus, Ohio; MFI calculated all results.

When there is a change from one survey approach to another, there are potential continuity problems. Therefore, the remainder of the appendix will discuss the 1977-1980 methodology in some detail and, as appropriate, the methodology used in earlier years.

CALCULATION APPROACHES

In 1977-1980, medians, quartiles, and composite averages were used as statistical measures. Most of the results in the Exhibits which form the basis for most of the discussion in the main body of the report are composite averages. Most of the results in the supplementary tables of this report and of the individual PAR Reports are presented as medians.

COMPOSITE AVERAGES

A composite average is an excellent measure of how a group of firms is doing as a whole. It is calculated by first adding together all appropriate dollar values or other values such as number of people and then calculating the ratio or performance measure. For example, to calculate the composite average Net Profit Before Taxes to Net Sales for All Paper Merchant Firms in Exhibit 2, the Net Profit Before Taxes for all firms were added together, the Net Sales for all firms were added together, and the following calculation was made:

$$\frac{\text{Net Profit Before Taxes}}{\text{Net Sales}} = \frac{\text{Total Net Profit Before Taxes for All Firms in the Survey}}{\text{Total Net Sales for All Firms}}$$

As an example, the 1977 dollar values are shown below:

$$\frac{\text{Total Net Profit Before Taxes for All Firms}}{\text{Total Net Sales for All Firms}} = \frac{\$ \quad 99,348,500}{3,763,119,920} = 2.64\%$$

If a firm did not supply all of the data needed for a particular calculation, then none of its data were used to develop the industry totals for that particular measure (if it supplied the needed data for other measures, then its data would be used to calculate those measures).

It appears that the measures shown in the "Summary of Performance Highlights" results published in previous years were composite averages. See B-2 of the 1979 Industry Report for details.

MEDIAN AND QUARTILE VALUES

Three values are generally reported for each performance measure in the PAR Reports. They are the upper quartile value -- the median firgure -- and the lower quartile value. The results presented in Tables 1 through 6 of this report are generally medians.

For any given performance measure, these three figures are calculated by, first, arraying (or arranging) all the numerical values of the performance measure as calculated for each firm in numerical order from the strongest to the weakest. The figure that falls in the middle of the array, or the listing of values, is the median. One-half of the firms had stronger performance and one-half of the firms had weaker performance.

The word "Quartile" implies that something is broken down into quarter segments. The upper quartile value is the figure one-quarter of the way down from the very strongest number. Or, it is the figure halfway between the very strongest and the median value.

The lower quartile figure would be the value one-quarter up from the very weakest ratio. It is the figure halfway between the median and the weakest value.

The presentation and use of median-quartile values minimizes the distortion caused by one firm reporting a very unusual value for a performance measure due to a mistake or because of some special circumstances. For example, a new firm that had sustained several years of losses might have a very small owners's equity--say $10. If the firm recovered and acheived a profit of, say $100,000, the calculated return on net worth would be $100,000/$10, or 1,000,000%.

Thus, an average type of summary measure could be seriously distorted. The median is, on the other hand, not as sensitive to such unusual figures; it values a very large number the same as any other figure above the median. For most applications, this results in more meaningful comparative values.

In addition, the median value is more representative of how individual firms (or division) have performed. While a composite average is dominated by the results of the larger firms, large and small firms have the same influence on a median. Therefore, it is desirable to examine both the median and the composite average for important performance measures.

Because of the approach used, the firm whose performance was the median for one performance measure may be, and probably is, different than the firm which was the median for another measure. This occurs because all of the values are resorted and independent medians and quartiles are calculated for each performance measure. Thus, there is no single upper quartile firm -- or median firm -- or lower quartile firm in this report.

For 1977 and 1978, firms were asked to report for their operations in each of the six NPTA Regions. Thus, a smaller or regional firm with operations in only one region submitted one survey form. It did not report on a branch or location basis. A larger firm with operations in two or more NPTA regions submitted either one form for all its operations, or individual forms for some or all of its regional operations. In 1979, firms were allowed to report on a branch basis if complete branch data could be provided. For such firms, the branch data were included in the industry data base. Since 1979, there have been seven NPTA Regions.

HOW THE RESULTS ARE ORGANIZED

The results of the survey were analyzed in four major groups as follows:

GROUP I - ALL PAPER MERCHANTS

All reporting firms were grouped together for some summary performance measure calculations.

GROUP II -- PRINTING PAPER MERCHANTS

All firms which had 80%, or more, of their total sales in printing paper were included in this group.

GROUP III- INDUSTRIAL PAPER MERCHANTS

Those firms that obtained 80%, or more, of their sales from industrial paper products were classified in this group.

GROUP IV - DUAL PAPER MERCHANTS

Those firms that had a more balanced product mix -- less than 80% of their sales were obtained from either printing or industrial paper -- were classsified in this group.

Before any further calculations were made, the reporting firms were sorted into one of the four groups above. Three of the groups were also sorted into several subgroups as discussed below.

GROUP I - ALL PAPER MERCHANTS

Summary performance measures were calculated for All Printing Paper Merchant firms as a group. No subgroupings such as those discussed below were used here.

GROUP II - PRINTING PAPER MERCHANTS

The Printing Paper Merchant firms (those firms that had more than 80% of their sales in printing paper) were sorted into five types of groups as follows:

1. One (1) All Reporting Printing Paper Emphasis Firms Group

2. Seven (7) NPTA Geographic Regions Groups

3. Four (4) Sales Volume Groups
   $0.0 - 8.0 Million in Sales
   $8.0 - 15 Million in Sales
   $15 - 40 Million in Sales
   Over $40 Million in Sales

4. Three (3) Return on Total Assets (ROTA) Groups -- The Printing Paper firms were also sorted into three "profitability" groups based upon their return on total assets (before taxes). In effect, each performance measure is shown as a median value for the "top 25%" of the printing paper merchant firms in terms of profitability; for the "middle 50%" and for the "bottom 25%." again in terms of profitability as measured by their before tax return on total assets. (This concept is discussed in greater detail later in this section.)

5. Four (4) Warehouse-Indirect-Direct Sales Emphasis Groupings. Because many performance measures differ significantly depending on warehouse-indirect-direct sales mixes. The criteria produced subgroups of approximately the same size.

70%, or More	Direct Sales
30-55%	Warehouse and Indirect Sales
55-70%	Warehouse and Indirect Sales
70%, or More	Warehouse and Indirect Sales

GROUP III - INDUSTRIAL PAPER MERCHANTS

The Industrial Paper Merchants (those firms that had more than 80% of their sales in industrial paper) were sorted into five types of groups as follows:

1. One (1) All Reporting Industrial Paper Emphasis Firms Group

2. Seven (7) NPTA Geographic Regional Groups

3. Four (4) Sales Volume Groups
   - $0.0 - 3.0 Million in Sales
   - $3.0 - 5.5 Million in Sales
   - $5.5 - 10 Million in Sales
   - Over $10 Million in Sales

4. Three (3) Return on Total Assets (ROTA) Groups -- The Industrial Paper Merchants were similarly sorted into their own "Profitability Groups" based upon the return on assets of the top 25%, middle 50%, and lower 25% of the reporting industrial merchant firms.

5. Three (3) Warehouse-Indirect Sales Emphasis Groupings -- The Industrial Paper Merchants were sorted into three warehouse-direct sales emphasis grouping which differed somewhat from those used for the Printing Paper Merchants. The groupings were:

Under 75%	Warehouse and Indirect Sales
75% to 90%	Warehouse and Indirect Sales
90%, and Over	Warehouse and Indirect Sales

GROUP IV- DUAL PAPER MERCHANTS

The Dual Paper Merchants (those firms selling both printing and industrial papers with less than 80% of sales in either commodity line) were sorted into five groups as follows:

1. One (1) All Dual Paper Merchant Firms
2. Seven (7) NPTA Geographic Regional Groups
3. Three (3) Sales Volume Groups
   - $0.0 - 10 Million in Sales
   - $10 - 50 Million in Sales
   - Over $50 Million in Sales
4. Three (3) Return on Total Assets (ROTA) Groups.
5. Three (3) Warehouse-Indirect Sales Emphasis Groups

0 - 60%	Warehouse and Indirect Sales
60 - 75%	Warehouse and Indirect Sales
Over 75%	Warehouse and Indirect Sales

RETURN ON TOTAL ASSET (ROTA) GROUPS

Return On Total Assets (ROTA) is an excellent measure of operational performance because it combines measures of both profitability (Net Profit Margin) and asset management (Total Asset Turnover) as shown below:

Return On Total Assets = Net Profit Margin x Total Asset Turnover

$$\frac{\text{Net Profit Before Taxes}}{\text{Total Assets}} = \frac{\text{Net Profit Before Taxes}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total Assets}}$$

Firms are separated into three ROTA subgroups -- representing high, middle, and low returns on total assets -- and the various performance measures are computed for each ROTA group. The discussion below and Figurs 1 explain how these ROTA Group measures were developed.

First, the before tax percentage Return On Total Assets is calculated for each firm (Step 1).

Next, the Return On Total Asset values for the firms are arranged in order from highest to lowest (step 2). In the example in Figure 1, the highest ROTA acheived by any firm was 22.38%, while the lowest was -8.69%. The sorting process is shown in Figure 1, assuming that there are 60 firms in the sample. Three ROTA groups are defined as follows using the upper and lower quartile as the cutoff points (Step 3):

	Number of Firms in Group	Range of Return on Total Assets for Firms in Group
High ROTA Groups	15	10.69% to 22.38%
Middle ROTA Groups	30	3.53% to 10.69%
Low ROTA Groups	15	-8.68% to 3.53%

The three groups remain fixed for all following calculations.

After the three ROTA groups have been established, the median for each performance measure is calculated for each group. For example, the "gross profit margin percentage" of each firm in each group is calculated (Step 4). Then the "gross profit margin percent" values are arranged in order from highest to lowest within each group (Step 5). The median value is selected in each of the three groups (Step 6). These three median values are reported as the representative performance of each of the three ROTA groups. The determination of the median gross profit margin of the low ROTA group is illustrated in the figure.

The procedure in Steps 4, 5, and 6 is repeated for each performance measure for each major group. Thus, if there are 300 performance measures in the tables, the calculation, rank ordering and median selection process would be repeated 900 times for each group to produce the median data for the three ROTA groups. This is why the use of computerized data processing is almost mandatory in a survey of this type.

The ROTA group data are usually valuable because they show the different operating policies and performance levels of the low, middle, and high profit firms in a major group. Careful examination of the ROTA group data is guaranteed to provide some surprises and considerable insight. Naturally, the ROTA group data should not be the sole basis for the major policy changes, but they will usually identify areas that should be explored more carefully.

FIGURE 1: DEVELOPMENT OF ROTA GROUP DATA

STEP 1 Calculate the before tax Return On Total Assets (ROTA) percentage for each firm as follows:

$$\text{ROTA} = \frac{\text{Net Profit Before Taxes}}{\text{Total Assets}} = \frac{70{,}000}{\$1{,}000{,}000} = 7.00\%$$

STEP 2 Arrange the firm's ROTA percentages from highest to lowest as illustrated below to the right.

STEP 3 Separate the firms into 3 groups: a "high ROTA group" composed of those firms whose ROTA was above the industry upper quartile ROTA value (10.69% in this case); a "low ROTA group" composed of those firms whose ROTA was below the industry lower quartile ROTA value (3.53%); and a "middle" ROTA group composed of those firms whose ROTA was between the two quartile values (Between 3.53% and 10.69%).

STEP 4 Within each of the 3 ROTA groups, calculate each perfromance measure.

STEP 5 Arrange the results from high to low in each of the 3 groups for each measure.

STEP 6 Determine the median value for each measure in each ROTA group. This value is published as the representative performance measure for the group. The application of Steps 5 and 6 to calculate the gross profit margin of the low ROTA group of firms is shown to the right.

ROTA GROUP DATA ARRAY

	HIGHEST ROTA:	22.38%
H I G H	R O T A	G R O U P
	UPPER QUARTILE:	10.69%
M I D D L E		
R O T A	MEDIAN	6.83%
G R O U P		
	LOWER QUARTILE:	3.53%
L O W	R O T A	G R O U P
	LOWEST ROTA:	-8.69%

ILLUSTRATION OF THE MEDIAN OF THE HIGH ROTA GROUP

	High ROTA Group
The Highest ROTA	22.38%
	.
	.
The Median of High ROTA Group	15.21%
	.
	.
The Upper Quartile ROTA	10.69%

APPENDIX C

MFI PROFITABILITY MODEL

The profitability model summarizes a firm's, or an industry's, performance in three key areas: profit margin in sales, asset management and financial leverage or balance. The model actually proceeds in two phases. Firstly, the profit margin and the asset turnover are multiplied for the asset return, that is to say:

$$\frac{\text{Net Profit Before Taxes}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Total Assets}} = \frac{\text{Net profit Before Taxes}}{\text{Total Assets}}, \text{ or (ROTA)}$$

The product of this multiplication is also known as the measure Return On Total Assets (ROTA). ROTA is an excellent measure of operational management effectiveness because it combines measures of a firm's performance in two key areas, namely; in sales profit and asset management.

Secondly, asset return (ROTA) and the leverage multiplier are multiplied for the Return On Net Worth (RONW), that is:

ROTA x Financial Leverage Multilpier = RONW

The two phases are customarily run together in summary fasion. We will display the model and substitute values from the financial statements of the fictitious Alpha Paper Company.

Alpha Paper's Data:

Net Sales	=	$10,000,000
Net Profit Before Taxes	=	350,000
Total Assets	=	2,700,000
Total Debt	=	1,350,000
Net Worth	=	1,350,000

Alpha Paper's Profit Model:

Profit Margin On Sales	x	Total Asset Turnover	=	Return On Total Assets	x	Financial Leverage Multiplier	=	Return On Net Worth
Net profit Before Taxes / Net Sales	x	Net Sales / Total Assets	=	Net profit Before Taxes / Total Assets	x	Total Assets / Net Worth	=	Net profit Before Taxes / Net Worth
$ 350,000 / $10,000,000	x	$10,000,000 / $ 2,700,000	=	$ 350,000 / $2,700,000	x	$2,700,000 / $1,350,000	=	$ 350,000 / $1,350,000
3.5%		3.70		12.96%		2.00		25.93%

(See the PAR User's Manual for more information on the MFI Profitability Model)

APPENDIX D

DEFINITIONS OF MEASURES APPEARING IN TABLES 1-6

The definitions of the performance measures reported in Tables 1-6 are given below. (The measures are discussed in more detail, and their calculation is related directly to the survey form used in appendix C-2 of the NPTA PAR User's Manual.)

1. Return on Capital Employed (%) = $\dfrac{\text{Net Profit Before Taxes + Interest on Borrowed Capital - Income from Outside Investments}}{\text{Ending Capital and Surplus* + Long term Liabilities + Bank Loans - Outside Investments}}$

(*Capital and Surplus = Common Equity = Net Worth)

2. Net Profit Before Taxes as % Net Worth = $\dfrac{\text{Net Profit Before Taxes}}{\text{Ending Capital and Surplus (or Common Equity)}}$

3. Total Assets to Net Worth (X) $\dfrac{\text{Ending Total Assets}}{\text{Ending Capital and Surplus (or Common Equity)}}$

4. Net Profit Before Taxes as % Total Assets = $\dfrac{\text{Net Profit Before Taxes}}{\text{Ending Total Assets}}$

5. Net Profit Before Taxes as % Net Sales = = $\dfrac{\text{Net Profit Before Taxes as}}{\text{Net Sales}}$

6. Net Profit Before Taxes as % Net Sales (LIFO Adj; %) = $\dfrac{\text{Net Profit Before Taxes + Additions to (Deletions From) LIFO Reserve}}{\text{Net Sales}}$

7. Net Sales to Total Assets (X) = $\dfrac{\text{Net Sales}}{\text{Ending Total Assets}}$

8. Whse Print Paper Gross Margin as % Whse Print Sls = $\dfrac{\text{Gross Trading Margin on Whse Print Paper Sales}}{\text{Total Whse Print Paper Sales}}$

9. Whse & Indirect Print Paper Gross Margin as % Whse & Indirect Print Paper Sls = $\dfrac{\text{Gross Trading Margin on Whse & Indirect Print Paper Sales}}{\text{Total Whse \& Indirect PP Sls}}$

10. Direct Print Paper Gross Margin as % Direct Print Paper Sales = $\dfrac{\text{Gross Trading Margin on Direct Print Paper Sales}}{\text{Total Direct Print Paper Sales}}$

11. Whse Industrial Paper Gross Margin as % Whse Industrial Paper Sales = $\dfrac{\text{Gross Trading Margin on Whse Industrial Paper Sales}}{\text{Total Whse IP Sales}}$

12.	Whse & Indirect Industrial Paper Gross Margin as % Whse & Indirect IP Sls	=	Gross Trading Margin on Whse & Indirect Industrial Paper Sales / Total Whse & Indirect IP Sls
13.	Direct Industrial Paper Gross Margin as % Direct Industrial Paper Sales	=	Gross Trading Margin on Direct Industrial Paper Sales / Total Direct IP Sales
14.	Warehouse & Indirect Sales as % Total Sales	=	Total & Indirect Sales / Total Net Sales
15.	Percent Sales Change Over Prior Year (%)	=	1979 Sales - 1978 Sales / 1978 Sales
16.	Net Sales Per Employee ($000)	=	Total Net Sales / Av. Total No. of People Employed*
17.	Gross Margin Per Employee ($000)	=	Total Gross Margin / Av. Total No. of People Employed*
18.	Total Payroll as % Gross Margin	=	Total Payroll / Total Gross Trading Margin
19.	Sales Service & Selling Expense as % Gross Trading Margin	=	Total Sales Service Expense + Total Selling Expense / Total Gross Trading Margin
20.	Total Operating Expenses as % Gross Trading Margin	=	Total Operating Expenses / Total Gross Trading Margin
21.	Print Paper Inventory Turnover (Whse Only; %)**	=	Total Whse Print Paper Cost of Goods Sold / [Beginning of PP Inventory + Ending PP Inventory] ÷ 2
22.	Gross Margin Return on Print Paper Inventory (Whse Only; %)	=	Total Whse Print Paper Gross Trading Margin / [Beginning of Print Paper + Ending PP Inventory] ÷ 2
23.	Industrial Paper Inventory Turnover (Whse Only; x)**	=	Total Whse Industrial Paper Cost of Goods Sold / [Beginning IP Inventory + Ending IP Inventory] ÷ 2
24.	Gross Margin on Industrial Paper Inventory (Whse Only; %)	=	Total Whse Industrial Paper Gross Trading Margin / [Beginning IP Inventory + Ending IP Inventory] ÷ 2
25.	Days Sales in Accounts Receivable on November 30 (days)	=	[Trade Notes & Accounts Receivable on Nov. 30, 1980] x 61 / Credit Sales for Oct. & Nov., 1980

*See the 1980 Survey Form, shown as Appendix G, for a more detailed explanation of "average total number of people employed."

**Remember that "indirect sales" were excluded from warehouse sales in 1978-80 but not separately identified in 1977.

APPENDIX E

MAJOR CHANGES IN THE NPTA/MFI SURVEY

RECOGNITION OF INDIRECT SALES IN THE 1978-80 SURVEYS

A major change was made in the NPTA Survey starting with the 1978 data year. A new category of sales - indirect sales - was indentified.

The Survey Form asked the participants to identify warehouse, indirect and direct sales of printing, and industrial type paper separately. The reason for this modification is that "indirect" sales (also called "special order" or "in-and-out" sales) are quite important in many firms. In addition, such sales have a major impact on areas such as inventory turnover and warehouse expenses. If such indirect sales are counted as straight warehouse sales, they can result in a misleadingly high value for "inventory turnover" and a perhaps misleadingly low value for warehouse expenses.

In the company PAR, inventory turnover values were calculated both including and excluding indirect sales. While this is a relatively crude approach, it is better than the less precise method used before the 1978 data year and is probably the best that is reasonably available. In Paper Merchant Performance, only the "warehouse only" inventory turnover measure is presented in the exhibits and tables. However, other measures are discussed in the text as appropriate.

As shown below, for the 1978 Survey, only about half the survey forms included warehouse and indirect sales data:

	Number of Forms Reporting Data			
	Printing	Industrial	Dual	Total
Both Warehouse and indirect Sales Data Supplied Separately	42	32	33	107
Only Total Warehouse and Indirect Sales Data Supplied	75	78	55	208

The same pattern holds for gross profit data. Thus, the more detailed "warehouse" and "indirect" sales based measures related to sales mix, gross margin, and inventory turnover should be used with care.

LIFO ADJUSTMENTS IN THE 1978-80 SURVEYS

First, the LIFO method inventory valuation can create significant distortions in various performance measures, such as gross margin, net profit margin, and inventory. In response to this problem, a number of new measures that adjust for the LIFO reserve and thus put everyone on an equal reporting basis have been added to the PAR. A thorough discussion of just how this was done is outlined in Appendix F.

In addition to all the new adjusted measures, there were two calculation changes. They are:

Net Profit Before Tax -- % Total Assets (adj.)
Net Profit Before Tax -- % Net Worth (adj.)

The total amount of ending LIFO reserve was added to ending assets and ending net worth for the calculation of both of these measures. This is discussed in Appendix F.

INVENTORY IN THE 1978-80 SURVEYS

Another improvement in 1978 was the use of average monthly inventory in calculating a number of new inventory management measures. Because inventories tend to fluctuate during the year due to the seasonable nature of business, the ude of an average monthly figure is often more accurate in determining turnover than using the average of beginning and ending inventories.

One of the more significant inventory measures is the Turn and Earn Profitability Index. Its use has been expanded to include combined warehouse and indirect Turn and Earn as well as divisions by Industrial and Printing Paper, and LIFO adjustments.

Turn & Earn is a combined inventory and gross margin performance measure. It is a product of Gross Margin Percent On Sales and physical Inventory Turnover (rather than Warehouse Sales To Inventory) as follows:

$$\text{Turn \& Earn Profitability Index} = \frac{\text{Gross Margin on Warehouse (and Indirect) Sales}}{\text{Whse (and Indirect) Sales}} \times \frac{\text{Warehouse (and Indirect) Cost of Goods Sold}}{\text{Average (Monthly) Inventory}}$$

$$= \text{Gross Margin \% On Whse (and Indirect) Sales} \times \text{Inventory Turnover Ratio}$$

$$= \text{"EARN"} \times \text{"TURN"}$$

Here, also, inventory is assumed to support warehouse and indirect sales. Therefore, warehouse and indirect gross profit and warehouse and indirect sales are used in the calculation.

The T&E Profitability Index can be used to obtain a first approximation of the profitability of carrying different product lines. Even though it does not consider differences in operating expenses or the other-than-inventory investment requirements associated with competing product lines, it usually provides considerable insight into the relative profitability of handling different product lines.

For the most part, these more refined measures appear in the company PARs received by individual firms but are not included in the Paper Merchant Performance.

ADDITIONS TO THE STUDY OF THE 1980 DATA YEAR

NOTE Most of these new measures do not appear in and are not discussed in Paper Merchant Performance. They are discussed here to provide a permanent record and to encourage non-participants to supply data for the Survey in order to obtain and use the company PAR.

New Measures In Your Par

1. AVERAGE NUMBER OF YEARS ON LIFO

   (The number of years you have used trhe LIFO system relates directly to the size of your ending LIFO reserve.)

2. DAYS SALES IN AVERAGE MONTHLY IP (or PP) INVENTORY
3. AVERAGE COLLECTION PERIOD (AVERAGE MONTHLY A/R; DAYS)
4. AVERAGE MONTHLY ACCOUNTS RECEIVABLE TURNOVER (X)
5. RETURN ON AVERAGE MONTHLY ACCOUNTS RECEIVABNLE INVESTMENT
6. AVERAGE PAYMENT PERIOD (AVERAGE MONTHLY ACCOUNTS PAYABLE)

   (Because of the seasonable nature of many businesses, inventories, receivables and payables also fluctuate seasonally. Therefore measures using ending fiscal year figures can be inaccurate. More reliable measures can be obtained by using average monthly data.)

Warehouse Only:

7. COST OF WAREHOUSE GOODS SOLD/AVERAGE INVENTORY (X)
8. WAREHOUSE GROSS MARGIN RETURN ON AVERAGE INVENTORY (%)
9. TURN & EARN PROFITABILITY INDEX (WHSE;%)

Warehouse & Indirect:

10. COST OF WAREHOUSE & INDIRECT GOODS SOLD/AVERAGE INVENTORY (X)
11. WAREHOUSE & INDIRECT GROSS MARGIN RETURN ON AVERAGE INVENTORY (%)
12. TURN & EARN PROFITABILITY INDEX (WAREHOUSE & INDIRECT;%)

    (In the past, all the above measures have been provided on a non-LIFO basis; that is, all firms adjusted to a FIFO basis. THis year the above measures have been added which mix data on both LIFO and FIFO bases, allowing you to make comparisons.)

13. NET SALES TO TOTAL ASSETS (ADJ; X)
14. TOTAL ASSETS TO NET WORTH (ADJ; X)

    (These well-known measures have been calculated on a non-LIFO basis. "Adj" means LIFO firms have been adjusted to a FIFO basis and then all firms considered together. The amount of your ending LIFO reserve is added to both Assets and Net Worth before the calculation is done.)

15. CASH DISCOUNTS TAKEN -- % CASH DISCOUNTS GIVEN (%)

    (This measure tells you whether or not you are taking all available purchase discounts or if you are giving too many sales discount. The higher this number is, the better for you. However, too high a number may indicate a too strict credit policy with your customers.)

16. CASH & CARRY RETAIL SALES AND BACKHAUL REVENUE DETAIL

(Two entirely new areas were explored this year -- Cash and Carry Retail Sales and Backhaul Revenue. The measures provided in Tables I-A and I-K of you PAR will give you an idea of the impact these segments of your business have on your overall statistics.)

Other Measures

17. TOTAL OPERATING EXPENSE PER EMPLOYEE ($000)
18. FRINGE BENEFITS PER EMPLOYEE ($000)
19. NET EDP EXPENSE -- % NET SALES

Confidential Measures:

20. COMPENSATION OF HIGHEST (EXCL SALESMEN; $000)
21. COMPENSATION OF HIGHEST PAID (EXCL SALESMEN -- % SALES)
22. COMPENSATION OF 2ND HIGHEST PAID (EXCL SALESMEN; $000)
23. COMPENSATION OF 2ND HIGHEST PAID (EXCL SALESMEN -- % SALES)
24. COMPENSATION OF 3RD HIGHEST PAID (EXCL SALESMEN; $000)
25. COMPENSATION OF 3RD HIGHEST PAID (EXCL SALESMEN -- % SALES)

APPENDIX F

PERFORMANCE MEASURES ADJUSTED FOR LIFO ACCOUNTING

In periods of inflation, the use of a LIFO inventory valuation approach will typically reduce a firm's ending inventory valuation and thus, also reduce its reported gross profit and net profit before taxes. An increasing number of firms are willing to accept lower accounting profits in order to reduce their taxes and increase their after tax cash flow. Other firms, for a variety good and sufficient reasons, choose to remain on FIFO or a similar approach.

In order to increase the comparability of the performance measures calculated for LIFO and non-LIFO firms, the LIFO reserves of the LIFO firms are added back to their reported gross profit, net profit, inventory, and other values as appropriate and "LIFO adjusted" measures are calulated. These adjusted measures are then integrated with the unadjusted measures of the non-LIFO (FIFO) firms and new, more comparable performance measures are calculated.

The approach used to calculate the "LIFO adjusted" measures for a typical LIFO firm is illustrated in Tables 1 and 2. Table 1 shows data that a typical firm on LIFO might have reported on its Survey Form (Column A); the "LIFO Adjustments" that would have been made by MFI (Column B); and the firm income statement and balance sheet data "as adjusted" (Column C).

The "as reported" data from Table 1, Column A are used to calculate the unadjusted performance measures shown in Table 2, Column D. The "LIFO Adjusted" performance measures shown in Table 2, Column E are calculated from the "as adjusted" data shown in Table 1, Column C. As discussed above, the "as adjusted" measures for the LIFO firms are combined with unadjusted data from the other participating firms to calculate the various "LIFO adjusted" industry performance measures shown in your company PAR.

TABLE 1
ADJUSTING FOR LIFO INVENTORY VALUATIONS
(Adjustments made before LIFO adjusted performance measures are calculated)

	TYPICAL LIFO FIRM DATA		
	Firm Data As Reported (A)	LIFO Adjustment (B)	Firm Data As LIFO Adjusted (C)
Income Statement			
Net Sales	$15,000,000	0	$15,000,000
Cost of Goods Sold	13,464,000	-$90,000[1]	13,374,000
Gross Trading Margin	$ 1,536,000	+$90,000	$ 1,626,000
Net Profit Before Taxes	$ 206,000	+$90,000	$ 296,000
Warehouse Sales & Gross Margin			
Warehouse Sales	$ 8,000,000		$ 8,000,000
Warehouse Cost of Goods Sold	6,800,000	-$90,000	6,710,000
Warehouse Gross Margin	$ 1,200,000	+$90,000	$ 1,290,000
Warehouse & Indirect Sales and Gross Margin			
W&I[2] Sales	$10,000,000		$10,000,000
W&I Cost of Goods Sold	7,900,000	-$90,000	7,810,000
W&I Gross Margin	$ 2,100,000		$ 2,190,000
Asset Items			
Accounts Receivable	$ 1,560,000	---	$ 1,560,000
Inventory (Beginning)	$ 1,300,000	+$180,000	$ 1,480,000
Inventory (Ending)	$ 1,740,000	+$270,000	$ 2,010,000
Inventory (Average)	$ 1,520,000	+$225,000	$ 1,745,000
Total Current Assets	$ 3,500,000	+$270,000	$ 3,770,000
Total Assets	$ 3,800,000	+$270,000	$ 4,070,000
Liability & Net Worth Items			
Total Debt	$ 2,100,000	---	$ 2,100,000
Net Worth	$ 1,700,000	+$270,000	$ 1,970,000
LIFO Reserves			
Beginning LIFO Reserve	$ 180,000		
Additions to LIFO Reserve	$ 90,000		
Ending LIFO Reserve	$ 270,000		

[1]All adjustments in this column are developed from the "LIFO Reserve" data appearing at the bottom of Column A.
[2]W&I = Warehouse & Indirect.

TABLE 2

LIFO ADJUSTED PERFORMANCE MEASURES
(All dollar values in thousands of dollars)

	(D) UNADJUSTED CALCULATION[1]	(E) LIFO ADJUSTED CALCULATION[2]
PROFITABILITY PERFORMANCE MEASURES		
Gross Margin / Net Sales	$ 1,536 / $15,000 = 10.24%	$1,536 + $90 / $15,000 = 10.84%
Gross Margin on Whse Sales / Whse Sales	$ 1,200 / $ 8,000 = 15.00%	$1,200 + $90 / $8,000 = 16.13%
Gross Margin on W&I Sales / Warehouse & Indirect Sales	$ 2,100 / $10,000 = 21.00%	$2,100 + $90 / $10,000 = 21.90%
Net Profit Before Taxes / Net Sales	$ 206 / $15,000 = 1.37%	$ 206 + $90 / $15,000 = 1.97%
Net Profit Before Taxes / Total Assets	$ 206 / $ 3,800 = 5.42%	$ 206 + $90 / $3,800 + $270 = 7.27%
Net Profit Before Taxes / Net Worth	$ 206 / $ 1,700 = 12.12%	$ 206 + $90 / $1,700 + $270 = 15.03%
LIFO INVENTORY USE		
Ending LIFO Reserve to Ending Inventory	$ 270 / $ 1,740 = 15.52%	
Additions to LIFO Reserve As % Net Profit Before Taxes	$ 90 / $ 206 = 43.69%	
Additions to LIFO Reserve As % Net Sales	$ 90 / $15,000 = .60%	
INVENTORY MANAGEMENT MEASURES		
Cost Whse Goods Sold / Avg Inventory	$ 6,800 / $ 1,520 = 4.47x	$6,800 - $90 / $1,745 = 3.85x
Whse Gross Margin[3] Return on Avg Inventory	$ 1,200 / $ 1,520 = 78.95%	$1,200 + $90 / $1,745 = 73.93%
Turn & Earn Profitability Index[4]	15.00% x 4.47 = 67.11%	16.13% x 3.85 = 62.01%

[1](Based on data as reported) and shown in Table 1, Column A.
[2](Based on LIFO firm data with LIFO additions or reserves added back as appropriate) as shown in Table 1, Column C.
[3]Warehouse Gross Profit ÷ Average Inventory
[4]"Warehouse Gross Margin (%)" times "Cost of Warehouse Goods Sold to Average Inventory"

TABLE 2 (CON'T)

LIFO ADJUSTED PERFORMANCE MEASURES
(All dollar values in thousands of dollars)

	(D) UNADJUSTED CALCULATION[1]	(E) LIFO ADJUSTED CALCULATION[2]
Cost of Goods Sold / Average Inventory	$\frac{\$7,900}{\$1,520} = 5.20x$	$\frac{\$7,900 - \$90}{\$1,745} = 4.48x$
W&I Gross Margin Return on Avg Inventory	$\frac{\$2,100}{\$1,520} = 138.16\%$	$\frac{\$2,100 + \$90}{\$1,745} = 125.5\%$
Turn & Earn Index (W&I)	21.00% x 5.20 = 109.2%	21.9% x 4.48 = 91.11%
ACCOUNTS RECEIVABLE MGT MEASURES		
Gross Margin Return on[3] Accounts Receivable	$\frac{\$1,536}{\$1,560} = 98.46\%$	$\frac{\$1,536 + \$90}{\$1,560} = 104.23\%$
Whse Gross Margin Return on[4] Accounts Receivable	$15.00\% \times \frac{\$15,000}{\$\ 1,560} = 144.23\%$	$16.13\% \times \frac{\$15,000}{\$\ 1,560} = 155.10\%$

[1](Based on data as reported) and shown in Table 1, Column A.
[2](Based on LIFO firm data with LIFO additions or reserves added back as appropriate) as shown in Table 1, Column C.
[3]Total Gross Profit ÷ Ending Accounts Receivable
[4]Warehouse Gross Margin (%) times "Total Sales ÷ Ending Accounts Receivable"

CONFIDENTIAL

NATIONAL PAPER TRADE ASSOCIATION PERFORMANCE ANALYSIS REPORT

PLEASE RETURN ENTIRE SURVEY FORM TO:

Management Foresight, Inc.
1670 Fishinger Road
Columbus, Ohio 43221

INSTRUCTIONS

1. Please enter figures for your most recent completed fiscal year or similar method of reporting annual sales (see definitions at end of questionnaire). This permits every firm to participate. It is not necessary to complete all sections of the form to effectively participate in the survey. Naturally, the more complete your Survey Form, the more complete your PAR Report will be.
2. For each region or branch for which a Performance Analysis Report (PAR) is desired, fill out a separate survey form. Additional forms may be ordered from NPTA Headquarters.
3. Enter all figures in dollars to the nearest dollar, as they actually appear on your financial statements. Please use minus signs for all negative numbers, not brackets.
4. Please check your data inputs to be sure that all of the sub-totals are the sum of the indicated line items. It is not necessary to complete all lines on the form for it to be useful; complete as many as possible, as accurately as you can. We would, however, like to receive as much information as possible in order to make the results representative of member firms.
5. A Definition Sheet is provided, explaining the items on the Survey Form. Please use these definitions to promote consistency in the reported data. Check the definitions if the meaning of any of the terms in the Survey Form are unclear.
6. Please return the Survey Form to Management Foresight as promptly as possible. It is vital that MFI have all completed forms no later than April 1, 1981.
7. If possible, please type all submitted data to minimize data transfer errors.
8. Your firm or branch will not be identified with the data provided on this form.
9. You may wish to retain a copy of your completed Survey Form for your files.
10. Any questions concerning the survey questionnaire, or the PAR Program, should be directed to Research Director Denis A. Scrandis.

CLASSIFICATION DATA

I. Company Identification Code ★ NPTA ____ / ____ / ____ / ____ / ____

II. Please check the box which best describes the data on this form:

☐ (A) *Total Firm, No Other Survey Forms Being Submitted:*
This form represents a total firm. No other form is being returned for any region, branch, location, or division. (These data will be included in all industry statistics, except that a multi-region firm will be omitted from the regional groupings.)

☐ (B) *Region, Branch, or Division Report:*
This form represents one branch, region, or division. *Note*: All forms should be on the same basis—i.e., all branch reports *OR* all regional reports *OR* all divisional reports. (These data will be included in all industry statistics, except that a multi-region division (etc.) will be omitted from the regional groupings.)

The following two types of forms will *not* be included in the data base to prevent double counting, but a PAR Report will be produced from the data supplied:

☐ (C) *Total Firm–Region, Branch, or Division Forms Also Being Submitted:*
This form represents a total firm. Separate forms (checked "B") are also being submitted for all regions, branches, or divisions. (This data will be omitted from all industry statistics to prevent "double counting.")

☐ (D) *Special Branch or Location Report:*
The data on this form represent the performance of a branch or location which is *also* included in regional or total firm data which are being reported. A PAR Report will be produced for the branch/division but the data will *not* be included in the data base.

[129] III. Please check your NPTA Region. (ALL SURVEY FORMS *MUST* CHECK THE APPROPRIATE BOX.)

REGION 1 ..... ☐
Maine, Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island.

REGION 2 ..... ☐
New York, Pennsylvania, New Jersey, Maryland, Delaware and District of Columbia.

REGION 3 ..... ☐
Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee and Alabama.

REGION 4 ..... ☐
Michigan, Wisconsin, Illinois, Indiana, Ohio, West Virginia, Kentucky and Missouri.

REGION 5 ..... ☐
Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Kansas, Montana, Wyoming and Colorado.

REGION 6 ..... ☐
Idaho, Utah, Arizona, Nevada, New Mexico, Washington, Oregon, California, Alaska and Hawaii.

REGION 7 ..... ☐
Texas, Oklahoma, Louisiana, Arkansas and Mississippi.

MULTIPLE REGIONS .....(0) ☐
This form represents operations in more than one region.

Note: Page 11 and 12 of questionnaire are definition pages. Please remove, by tearing along perforated edge for easy use and reference.

NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Paper Merchant Performance

(Based on 1980 Data)

IMPORTANT: A separate sheet of definitions, explanatory comments and clarifications has been provided for your use in completing the PAR Questionnaire. Simply tear the last page of this questionnaire along the perforated edge and separate the definition sheet from the questionnaire for easy use and reference. The definitions have been provided to assure uniformity of data between reporting firms. Please refer to the definitions provided to verify that you are providing data the way other participating firms will be reporting. Please fill in this questionnaire as completely as possible (to the nearest dollar) and return promptly.

The PAR Report is intended to be a working financial tool for printing, industrial and dual paper merchants that are members of NPTA. Please report only those operations that are directly associated with your paper merchant operation. Please do not include, for example, operations involving converting,[1] floor covering, toy or other distribution and manufacturing operations if possible. If you cannot separate such operations and feel that they constitute a minor portion of your business, you are urged to complete the questionnaire and participate in the PAR Program.

Data dealing with such operations will not be brought back into the report under the balance sheet information. If you feel that such discrete operations constitute such a small portion of your firm or that it is impossible to segregrate such sales, please provide your information the way you feel best suits your firm. However, if possible, please report only those operations that are directly associated with your paper merchant operations.

An asterisk (*) following an item on the questionnaire signifies that a definition or explanation appears on the definition sheet for your convenience and to promote uniformity in reporting.

The numbers in brackets [ ] are for MFI's use in computer processing. For example, [103]. Computer numbers do not correspond to item numbers at the left of the page.

[1]Regular merchant operations of cutting and hole punching are NOT considered converting business for this report. Example of conversion operations to be excluded would be all roll-to-sheet changes, box and envelope manufacturing, in addition to sheeting, slitting and rewinding.

TREND PAR ORDER FORM

(Please Check Appropriate Box)

☐ Two Year Trend—Please produce a two year Trend PAR for this Survey Form. My firm participated in last year's (1980) PAR program and is therefore eligible to receive trend information. I understand NPTA will bill me $75 for the production of the Trend PAR.

☐ Three Year Trend—Please produce a three year Trend PAR for this Survey Form. My firm participated in the 1979 and 1980 PAR programs and is therefore eligible to receive trend information. I understand NPTA will bill me $120 for the production of the Trend PAR.

NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report
(Based on 1980 Data)

Line Item No.	INCOME STATEMENT— SALES & GROSS TRADING MARGIN DATA FOR 1980	MFI ID#	Printing Paper Sales*	MFI ID#	Industrial Paper Sales	MFI ID#	Total Paper Sales
SECTION A Warehouse Sales							
1	Net Sales, After Returns and Allowances	[103]	$	[113]	$	[183]	$
2	Costs of Goods Sold	[104]	$	[114]	$	[184]	$
3	Gross Trading Margin	[105]	$	[115]	$	[185]	$
SECTION B Indirect Sales[1]							
4	Net Sales, After Returns and Allowances	[186]	$	[189]	$	[195]	$
5	Cost of Goods Sold	[187]	$	[190]	$	[196]	$
6	Gross Trading Margin	[188]	$	[191]	$	[197]	$
SECTION C (C) = (A + B) Warehouse & Indirect Sales[2]							
7	Net Sales, After Returns and Allowances	[198]	$	[201]	$	[207]	$
8	Cost of Goods Sold	[199]	$	[202]	$	[208]	$
9	Gross Trading Margin	[200]	$	[203]	$	[209]	$
SECTION D Direct Sales							
10	Net Sales, After Returns and Allowances	[108]	$	[118]	$	[213]	$
11	Cost of Goods Sold, Include (For Direct) Freight From Mill to Customer	[109]	$	[119]	$	[214]	$
12	Gross Trading Margin	[110]	$	[120]	$	[215]	$
SECTION E Total Sales							
13	Total Net Sales, After Returns & Allowances (Sum of Lines 1, 4 and 10 or Sum of Lines 7 & 10)	[204]	$	[210]	$	[3]	$
14	Total Cost of Goods Sold (Sum of Lines 2, 5 and 11 or Sum of Lines 8 & 11)	[205]	$	[211]	$	[4]	$
15	Total Gross Trading Margin (Line 13 minus Line 14, Also Sum of Lines 3, 6 and 12 or Sum of Lines 9 and 12)	[206]	$	[212]	$	[5]	$
SECTION F Cash-and-Carry Retail Sales[3]							
16	Net Sales, After Returns	[64]	$	[69]	$	[141]	$
17	Cost of Goods Sold	[65]	$	[150]	$	[142]	$
18	Gross Trading Margin	[68]	$	[96]	$	[143]	$

[1] "Indirect Sales" are those sales that are delivered from the manufacturer to the merchant for immediate final shipment as a unit (at the merchant's expense) to the merchant's customer. Normally such sales are not put into inventory but are handled to and from the receiving-shipping area of the merchant.

[2] If you cannot separate your warehouse and indirect sales you may omit Sections A and B, and report only in Sections C, D, and E.

[3] In order to explore a new area of paper merchant performance analysis, namely, analysis of Cash-And-Carry Retail Sales, merchants operating Cash-And-Carry Retail Sales outlets are asked to complete Section F. a) Merchants operating Cash-And-Carry outlets as profit centers separate from wholesaling and accounting for retailing separately from wholesaling should report available retail data in completing Section F. b) Merchants operating Cash-And-Carry Retail Sales but accounting for it under wholesaling should estimate retail data in completing Section F; the estimated retail amounts should not be subtracted from the wholesale data that is reported in Sections A through E. Separate Cash-And-Carry reporting in this form applies only to Line Items 16, 17, 18 and 25; no departures from normal reporting should be taken in other parts of this Questionnaire.

IF YOU CANNOT OR DO NOT INTEND TO COMPLETE ANY LINE ITEM ON THE SURVEY FORM, IT IS RECOMMENDED YOU CROSS OUT, OR PUT A LINE THROUGH THE INFORMATION YOU ARE OMITTING TO AVOID CONFUSION WHEN THE DATA IS BEING TABULATED.

NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report

NOTE: All reporting firms should complete this section on the same basis for the years 1979 and 1980, whether a first time reporting firm or not, to avoid inconsistencies in reporting methods.

Please report on those operations that are directly associated with your paper merchant operations. Please do not include, for example, operations involving converting*, floor covering, toy or other distribution and manufacturing operations if possible.

Line Item No.	PRIOR YEAR SALES DATA FOR THE YEAR OF 1979	MFI ID#	Printing Paper Sales	MFI ID#	Industrial Paper Sales	MFI ID#	Total Paper Sales
20	1979 Warehouse Sales (A)	[159]	$	[164]	$	[175]	$
21	1979 Indirect Sales (B)[1]	[160]	$	[165]	$	[176]	$
22	1979 Warehouse & Indirect Sales (C) = (A + B)[2]	[161]	$	[166]	$	[177]	$
23	1979 Direct Sales (D)	[162]	$	[167]	$	[178]	$
24	1979 Total Sales (E) (Sum of Lines 20, 21 and 23 or Sum of Lines 22 and 23)	[171]	$	[172]	$	[179]	$
25	1979 Cash-and-Carry Retails Sales[3]	[39]		[44]		[149]	

[1] "Indirect Sales" are those sales that are delivered from the manufacturer to the merchant for immediate final shipment as a unit (at the merchant's expense) to the merchant's customer. Normally such sales are not put into inventory but are handled to and from the receiving-shipping area of the merchant.

[2] If you cannot separate your warehouse and indirect sales you may omit Lines 20 and 21 and report only on Lines 22, 23, and 24.

[3] In order to explore a new area of paper merchant performance analysis, namely, analysis of Cash-And-Carry Retail Sales, merchants operating Cash-And-Carry Retail Sales outlets are asked to complete Line Item No. 25. a) Merchants who operated Cash-And-Carry outlets as profit centers separate from wholesaling and who accounted for retailing separately from wholesaling should report available retail data in completing Item No. 25. b) Merchants who operated Cash-And-Carry Retail Sales but who accounted for it under wholesaling should estimate retail data in completing Item 25; the estimated retail amounts should not be subtracted from the wholesale data that is reported in Line Item Nos. 20-24.

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PLEASE TYPE ALL DATA WHEN POSSIBLE.

NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report
(Based on 1980 Data)

PLEASE REPORT ONLY THOSE OPERATIONS THAT ARE DIRECTLY ASSOCIATED WITH YOUR PAPER MERCHANT OPERATIONS. PLEASE DO NOT INCLUDE, FOR EXAMPLE, OPERATIONS INVOLVING CONVERTING*, FLOOR COVERING, TOY OR OTHER DISTRIBUTION AND MANUFACTURING OPERATIONS IF POSSIBLE.

Line Item No.	INCOME STATEMENT	MFI ID #	Dollar Amount
30	Total Firm Gross Trading Margin (Line 15, Column 3 From Page 4)	[7]	$
31	Storage*	[6]	$
32	Total Handling (Fixed + Variable)*	[70]	$
33	Delivery*	[9]	$
34	Office*	[10]	$
35	Administrative*	[11]	$
36	Sales Service*	[12]	$
37	Selling*	[13]	$
38	TOTAL OPERATING EXPENSE (31 to 37 Inclusive)	[15]	$
39	NET OPERATING PROFIT OR LOSS (Line 30 minus Line 38)	[16]	$
	OTHER NON-OPERATING INCOME (Financial Gains):		
50	Cash Discounts Earned (For Prompt Payment)	[17]	$
51	Income from Outside Investments	[14]	$
52	All Other Non-operating Income	[18]	$
53	TOTAL NON-OPERATING INCOME (Financial Gains) (Lines 50 + 51 + 52)	[19]	$
54	TOTAL INCOME (Line 39 + 53)	[23]	$
	OTHER NON-OPERATING EXPENSES (Financial Losses):		
60	Cash Discounts Allowed	[20]	$
61	Interest on Borrowed Capital	[24]	$
62	All Other Non-operating Expenses	[21]	$
63	TOTAL NON-OPERATING EXPENSES (Lines 60 + 61 + 62)	[22]	$
70	NET PROFIT OR (LOSS) BEFORE TAXES (Line 54 minus 63; show minus sign for loss)	[25]	$
71	Corporate Income Taxes (Federal, State, City)	[26]	$
72	NET PROFIT OR (LOSS) AFTER TAXES (Line 70 minus 71)	[27]	$
80†	Revenue from Backhauling (Estimate if necessary)	[8]	$

*For a specific definition and explanation of personnel and accounts to include, please refer to the definition sheet provided.

†To explore a new area of paper merchant performance, namely, analysis of backhauling, merchants backhauling are asked to complete line item No. 80. Do not alter reporting of Line Items 30-72; rather, breakout backhaul revenues that are included in the operating statement for separate consideration.

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NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report
(Based on 1980 Data)

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Line Item No.	BALANCE SHEET COMPARABLE WITH DISTRIBUTION PROFIT AND LOSS STATEMENT	MFI ID#	Dollar Amount
90	Cash & Cash Equivalent	[30]	$
91	Accounts & Notes Receivable, Trade (Less Reserve for Bad Debts)-Printing and Industrial	[31]	$
92	Inventory (Less Reserve for LIFO)-Printing and Industrial (Include "In Transit")	[32]	$
93	Other Current Assets and Those Not Included in Items 91 and 92	[33]	$
94	TOTAL CURRENT ASSETS (Sum of Lines 90 + 91 + 92 + 93)	[35]	$
95	Net Fixed Assets	[36]	$
96	Outside Investments	[37]	$
97	Other Non-Current Assets	[38]	$
98	TOTAL ASSETS (Sum of Lines 94 + 95 + 96 + 97)	[40]	$
99	Accounts Payable-Printing and Industrial	[41]	$
100	Bank Loans Due in Less than One Year (Include Intercompany Liabilities)	[42]	$
101	Other Current Liabilities and Those Not Included in Item 99	[43]	$
102	TOTAL CURRENT LIABILITIES (Sum of Lines 99 + 100 + 101)	[45]	$
103	Long Term Liabilities (Include Intercompany Liabilities)	[46]	$
104	Net Worth (Equity)	[49]	$
105	TOTAL LIABILITIES & NET WORTH (Sum of Lines 102 + 103 + 104; Should equal Line 98 Above)	[50]	$
	OTHER INVENTORY DATA (Report "Less Reserve For LIFO")		
106	Printing Paper Inventory on First Day of Fiscal Year†	[121]	$
107	Industrial Paper Inventory on First Day of Fiscal Year†	[122]	$
108	Total Inventory on First Day of Fiscal Year† (Sum of Lines 106 + 107)	[123]	$
109	Printing Paper Inventory on Last Day of Fiscal Year†	[124]	$
110	Industrial Paper Inventory on Last of Day of Fiscal Year†	[125]	$
111	Total Inventory on Last Day of Fiscal Year† (Sum of Lines 109 + 110; Should Equal Line 92)	[126]	$
112	Average Monthly Printing Paper Inventory	[193]	$
113	Average Monthly Industrial Paper Inventory	[194]	$
114	Inventory is Recorded on (Please Check Box) (1) ☐ FIFO (2) ☐ LIFO (3) ☐ Other	[130]	
115	If your inventory was on LIFO please complete the following section:		
	Your LIFO Reserve at Beginning of the Year. $_____	[131]	
	Additions to (show as plus) or deletions from (use a minus sign) your LIFO Reserve in 1980. $_____	[132]	
	Your LIFO Reserve at End of the Year. $_____	[133]	
116	Number of years on LIFO _____	[100]	

†If on LIFO, report all inventory at LIFO values, that is, "Less LIFO Reserves."

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PLEASE TYPE ALL DATA WHEN POSSIBLE.

NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report (Based on 1980 Data)

PLEASE REPORT ONLY THOSE OPERATIONS THAT ARE DIRECTLY ASSOCIATED WITH YOUR PAPER MERCHANT OPERATIONS. PLEASE DO NOT INCLUDE, FOR EXAMPLE, OPERATIONS INVOLVING CONVERTING*, FLOOR COVERING, TOY OR OTHER DISTRIBUTION AND MANUFACTURING OPERATIONS IF POSSIBLE.

Line Item No.	ACCOUNTS RECEIVABLE DATA "Printing and Industrial Only"	MFI ID#	Dollar Amount
120	Bad Debt Losses in 1980 (Actual Losses After Recoveries)	[92]	$
121	Reserve for Bad Debts—End of Year	[93]	$
122	Credit Sales for October and November, 1980	[94]	$
123	Trade Notes & Accounts Receivable (After Reserve for Bad Debts) on November 30, 1980	[95]	$
124	Accounts Receivable that Were 30 to 59 Days Old on November 30, 1980	[218]	$
125	Accounts Receivable that Were 60 to 89 Days Old on November 30, 1980	[219]	$
126	Accounts Receivable that Were 90 Days and Over on November 30, 1980	[220]	$
127	Average Monthly Accounts Receivable (Divide the sum of the twelve monthly amounts by twelve)	[144]	$
	PURCHASES-PAYABLES DATA (For Trade Suppliers)		
130	Your Total Purchases From Trade Suppliers for the Year, After Returns but Before Discounts Earned	[221]	$
131	Your Net Purchases from Trade Suppliers in Nov. and Dec. 1980, After Returns but Before Discounts Earned	[28]	$
132	Your Trade Accounts Payable on Dec. 31, 1980	[29]	$
133	Average Monthly Accounts Payable (Divide the sum of the twelve monthly amounts by twelve)	[145]	$
	OTHER DATA		
140	What Were Your Total Lease Payments for Both Facilities and Equipment Last Year?	[34]	$
141	What Were Your Total Data Processing Expenses Last Year? Include both equipment and facility lease payments and or depreciation, people costs, supplies and service bureau costs. Do not include any Data Processing occupancy costs (space charges, power, etc.) or postage, invoice or statement costs. Do not subtract offsetting Data Processing Service Sales.	[47]	$
142	What Were Your Dollar Sales of Data Processing Services to Outside Parties Last Year (if any)?	[48]	$
143	Number of Warehouse Locations	[97]	#
144	Total Cubic Feet of Warehouse Space (length × width × potential stacking height of all warehouse space).	[192]	cu. ft

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NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report
(Based on 1980 Data)

It is not necessary to supply any of the following data to effectively participate in the Survey. If you can supply the data, the industry results will be more valuable and your PAR Report will be more complete. Furnish what you can, particularly Line 212.

Please report only those people who are associated with the other data reported on the Survey Form. For example, since you do not report on a conversion operation, do not report those people here.

Line Item No.	Personnel—by Function (See Note Below)	MFI ID#	Number of People in Function†	MFI ID#	Payroll: Salaries Commissions and Bonuses†
200	Owner-Managers	[51]		[71]	$
201	Non-Owner Chief Executive Officer	[52]		[72]	$
202	Branch Managers	[53]		[73]	$
203	All Other Managers	[54]		[74]	$
204	Non-Executive Office Employees (Clerical)	[55]		[75]	$
205	Total Management & Office Personnel (Sum of Lines 200 thru 204)	[56]		[76]	$
206	Outside Salesmen & Sales Managers	[57]		[77]	$
207	All Sales Service Personnel	[58]		[78]	$
208	Total Selling Personnel (Sum of Lines 206 + 207)	[59]		[79]	$
209	All Handling Personnel (Warehouse)	[60]		[80]	$
210	All Delivery Personnel (Include Contract Drivers)	[61]		[81]	$
211	All Other Personnel	[62]		[82]	$
212	Total Personnel & Payroll (Sum of Lines 205 + 208 + 209 + 210 + 211)	[66]		[86]	$
213	Total Contributions to Profit Sharing and Pension Fund for Owner-Managers			[87]	$
214	Total Contributions to Profit Sharing and Pension Fund for all Non-Owner Employees			[88]	$
215	All Other Fringe Benefits Including Group Life, Health and Accident Insurance & Payroll Taxes for All Employees			[89]	$
216	Total Fringe Benefit Costs (Sum of Items 213 + 214 + 215)			[90]	$
217	Total Compensation (Sum of Lines 212 + 216)			[91]	$

OTHER PERSONNEL DATA

220	Total compensation of First Highest Paid Employee: including Owners and Salesmen on Commission. Include salary, bonuses and contributions to pension and profit sharing plans.	[98]	$
221	Total Compensation of Second Highest Paid Employee: including Owners and Salesmen on commission. Include all compensation as in 220 above.	[99]	$
222	Total Compensation of Third Highest Paid Employee: including Owners and Salesmen on commission. Include all compensation as in 220 above.	[173]	$
223	Total Compensation of First Highest Paid Employee: including Owners but excluding Salesmen on commission. Include all compensation as in 220 above.	[146]	$
224	Total Compensation of Second Highest Paid Employee: including Owners but excluding Salesmen on commission. Include all compensation as in 220 above.	[147]	$
225	Total compensation of Third Highest Paid Employee: including Owners but excluding Salesmen on commission. Include all compensation as in 220 above.	[148]	$
226	Total Travel and Entertainment Expense for Outside Salesmen. Last Year Only.	[67]	$

†You should allocate the portion of the *dollar amount and number* of people to each function as accurately as possible—based upon the amount of *time* spent within each function. You may allocate as little as 1/10th of a person to a function. Convert part-time employees into full-time equivalents, depending on how much they worked relative to full-time employees. Firms providing centralized services to a number of houses should allocate number of people as well as costs to regional reports.

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NATIONAL PAPER TRADE ASSOCIATION, INC.

Survey Form for the 1981 Performance Analysis Report
(Based on 1980 Data)

PLEASE REPORT ONLY THOSE OPERATIONS THAT ARE DIRECTLY ASSOCIATED WITH YOUR PAPER MERCHANT OPERATIONS. PLEASE DO NOT INCLUDE, FOR EXAMPLE, OPERATIONS INVOLVING CONVERTING*, FLOOR COVERING, TOY OR OTHER DISTRIBUTION AND MANUFACTURING OPERATIONS IF POSSIBLE.

It is not necessary to supply any of the following data to effectively participate in the Survey. However, "average order size" and "average invoice line amount" are very important performance measures that can help you evaluate sales, office and warehouse efficiency, and product line and customer profitability.
If you cannot separate your warehouse and indirect sales, you may wish to omit Lines 250-251, 260-261, and 270-271 and report on Lines 252, 262 and 272 instead.

Line Item No.	ORDER DATA	MFI ID#	Number of Orders For The Year	MFI ID#	Total Number of invoice Lines for The Year *
	PRINTING PAPER ORDERS:				
250	Warehouse Orders	[101]		[102]	
251	Indirect (Special) Orders[1]	[83]		[84]	
252	Warehouse & Indirect Orders (Sum of Lines 250 and 251)	[85]		[127]	
253	Direct Orders	[106]		[107]	
254	Total Printing Paper Orders (Sum of Lines 252 and 253)	[128]		[63]	
	INDUSTRIAL PAPER ORDERS:				
260	Warehouse Orders	[111]		[112]	
261	Indirect (Special) Orders	[135]		[136]	
262	Warehouse & Indirect Orders (Sum of Lines 260 and 261)	[137]		[138]	
263	Direct Orders	[116]		[117]	
264	Total Industrial Paper Orders (Sum of Lines 262 and 263)	[139]		[140]	
	TOTAL PRINTING AND INDUSTRIAL ORDERS:				
270	Total Warehouse Orders (Sum of Lines 250 and 260)	[151]		[152]	
271	Total Indirect Orders (Sum of Lines 251 and 261)	[153]		[154]	
272	Total Whse & Indirect Orders (Sum of Lines 252 and 262)	[155]		[156]	
273	Total Direct Orders (Sum of Lines 253 and 263)	[157]		[158]	
274	Total Orders for the Year (Sum of Lines 254 + 264, also Lines 272 + 273)	[1]		[2]	

[1] "Indirect Orders" are those orders that are delivered from the manufacturer to the merchant for immediate final shipment as a unit (at the merchant's expense) to the merchant's customer. Normally such orders are not put into inventory but are handled to and from the receiving-shipping area of the merchant.

*See Page 12 for explanation of "Invoice Line Items."

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NATIONAL PAPER TRADE ASSOCIATION, INC.

DEFINITION SHEET

Survey Form for 1980 PAR

IN AN EFFORT TO STANDARDIZE AND PURIFY THE INFORMATION CONTAINED IN THE PAR REPORT, THE FOLLOWING DEFINITIONS, EXAMPLES AND EXPLANATIONS HAVE BEEN PROVIDED FOR YOUR CONVENIENCE. PLEASE REMOVE THE DEFINITION SHEET BY TEARING ALONG THE PERFORATED EDGE FOR EASY USE AND REFERENCE. YOU NEED NOT RETURN THE DEFINITION SHEET WITH THE COMPLETED QUESTIONNAIRE. SHOULD YOU HAVE ANY PROBLEMS OR QUESTIONS THAT CAN NOT BE ANSWERED BY THE INFORMATION PROVIDED ON THIS SHEET, PLEASE CALL NPTA RESEARCH DIRECTOR DENIS A. SCRANDIS AT 212-682-2570.

TOPIC	LINE ITEM NUMBER (S)	DEFINITION
Printing Paper Sales	1	Printing paper sales include sale of fine paper, envelopes, cut and standard sizes, text and covers and printing supplies (toner, inks, blankets, plates, etc.) including punching and cutting as a service of printing sales. Exclude all separate and discreet operations such as those mentioned at the top of the survey pages.
Brokerage	1 & 4	Brokerage, any item you do not bill for but receive commission on, should be excluded from sales information and put under "other income."
Conversion	1 & 4	Conversion operations include roll-to-sheet changes, box and envelope manufacturing, in addition to sheeting, slitting and rewinding. Do not consider cutting and hole punching as converting operations.
Storage	31	Storage includes: 1) Rent and or depreciation, taxes, repairs and maintenance, and insurance apportioned to warehouse space, 2) heat and power apportioned to warehouse space, 3) payments for storage in public warehouses, and 4) insurance on merchandise.
Handling	32	Handling includes, a-Personnel: Warehouse foremen, paper cutters, shipping and receiving clerks, janitors and other warehouse employees. b-Accounts: 1) Salaries, wages and benefits (including pension, profit sharing and payroll taxes) for warehouse employees, 2) packing and shipping supplies, 3) depreciation, insurance, maintenance and repairs on storage and handling equipment, and 4) trimming, cutting and punching.
Delivery	33	Delivery includes, a-Personnel: Drivers, helpers and garage employees. b-Accounts: 1) Salaries, wages and benefits (including pension, profit sharing and payroll taxes) for delivery employees, 2) trucking rentals and payments to public carriers for warehouse sales (transportation cost on direct sales should be charged to cost of goods sold), 3) vehicle taxes, licenses and insurance, 4) portion of occupancy expense (rent, heat, power) allotted to vehicle storage, 5) gas, oil, tires, etc., 6) vehicle depreciation, repairs and maintenance, and 7) UPS and parcel post for warehouse sales.
Office	34	Office includes, a-Personnel: Typists, office machine operators, accounting department employees and managers, data processing employees and managers, general office employees, teletype and switchboard operators, office managers and office personnel. b-Accounts: 1) Salaries, wages and benefits (including pension, profit sharing and payroll taxes) for office employees, excluding Administration (see definition of item 35) and Sales Service Personnel, 2) apportionment of occupancy expense for office area (rent, heat, power), 3) rent or depreciation, repairs and maintenance on furniture, fixtures and equipment, 4) postage for general correspondence, 5) stationery, forms and office supplies, and 6) outside office services.
Administration	35	Administration includes, a-Personnel: Executives of the company, branch managers and those charged with the overall management, financial and credit policies of the business, including their personal secretaries and assistants. b-Accounts: 1) Salaries and benefits (including pension, profit sharing and payroll taxes) of administrative employees (less compensation attributable to other activities), 2) apportionment of occupancy expense for executive space (rent, heat, power), 3) rent and depreciation, repairs and maintenance on furniture, fixtures and equipment, 4) general liability insurance employee bonds and other insurance (exclusive of employee benefits), 5) telephone, telegraph and teletype expenses exclusive of sales and office activities, 6) bad debt, credit and collection expenses, 7) legal, auditing, consulting and directors' fees, 8) taxes exclusive of Federal Income Taxes and payroll taxes, 9) membership dues and subscriptions, 10) donations, and 11) executive entertainment and travel.

Sales Service	36	Sales service includes, a-Personnel: Advertising, merchandising, mill order, inventory, order desk, traffic, sample department personnel and purchasing agent. b-Accounts: 1) Salaries and benefits for sales service employees including managers (exclusive of compensation attributable to other significant activities), 2) apportionment of occupancy expense (rent, heat, power), 3) catalogs, samples and direct-mail advertising and samples, 4) postage and messenger service on advertising and samples, 5) media advertising, 6) telephone, telegraph and teletype related to selling, 7) salesmen's equipment and supplies, and 8) sales service personnel travel and entertainment.
Selling	37	Selling includes, a-Personnel: Outside salesmen, sales management and trainees. b-Accounts: 1) Salaries, commissions, bonuses and benefits (including pension, profit sharing and payroll taxes) paid for sales produced (includes attributable portion of executive and other salaries), 2) apportionment of occupancy expense (rent, heat, power), 3) automobile allowances, 4) travel and entertainment, and 5) incidental expenses.
Invoice Line Item		On each invoice a line item is each product item shipped. (A separate worksheet providing the guidelines for establishing the number of line items your firm handles per year is attached for your convenience).

GUIDELINES FOR FIRMS UNABLE TO REPORT ON FISCAL YEAR BASIS

The National Paper Trade Association, Inc., recommends that each member participating in the PAR Program, report financial information based on their most recent fiscal year. If, however, the fiscal year does not permit such reporting, or if the firm feels that more timely information is needed, NPTA recommends that the firm follow one of the following methods: 1) provide data from the four most recent quarterly reports, 2) use data from the previous twelve month period, although not necessarily a fiscal year, 3) use twelve most recent monthly reports, or 4) take information from fiscal year in progress and prorate the remaining months using prior year trends as a guideline.

Worksheet to Determine Weighted Average Number of Line Items

	Line No.	Printing Whse (A)	Printing Indirect (B)	Printing Whse & Ind. (C=A+B)	Printing Direct (D)	Indust. Whse (A)	Indust. Indirect (B)	Indust. Whse & Ind. (C=A+B)	Indust. Direct (D)
Block #1: Total Line Items	1								
Block #2: Total Line Items	2								
Total A (Line 1 + Line 2)	3								
Average Line Items For Total A (Total A ÷ 100)	4								
Block #3: Total Line Items	5								
Total B (Line 3 + Line 5)	6								
Average Line Items For Total B (Total B ÷ 150)	7								
Block #4: Total Line Items	8								
Total C (Line 6 + Line 8)	9								
Average Line Items For Total C (Total C ÷ 200)	10								

To determine the weighted average number of line items shipped per order by sampling, it is necessary to review prior orders for each major sector of the business. For survey purposes, define a line item as: Each product item shipped.

Orders may be reviewed in blocks of 50 until the average number of line items per order stabilizes and it can be assumed that the average represents a statistically valid figure.

Start by selecting 50 consecutive orders from 1-3 months old and 50 more from 5-8 months old for *each major sector*. Count the number of line items shipped (as defined above) on each. Insert these figures on the first and second lines of the above calculation form.

Add lines 1 and 2 to obtain the Total A or line 3. Divide the total on line 3 by 100 to determine the average number of line items per order in each category, and enter on line 4.

Select another representative block of 50 orders for *each major sector*. Again, count the line items on these orders and write the number on line 5. Add lines 3 and 5 to get the total; write on line 6. Divide this total by 150 to get the average number of line items per order for the three batches (line 7). If lines 4 and 7 are within 10% of each other, the figure on line 7 can be assumed to show a valid average number of line items and can be used to calculate expense rates.

If lines 4 and 7 vary by more than 10% for any category, choose another block of 50 representative orders for that category and complete lines 8, 9 and 10. If the averages on line 7 and 10 are within 10%, use this figure for expense calculation. Continue the sampling in this manner until the average number of line items stabilizes.